# EIM ATTRIBUTES CONTENTS

Updated 11/17/1999: On-line Help for EIM Attributes is complete for all windows.

Click on a word or words with a *dotted underline* in the list of Attributes or within a Help Topic to display a *popup* containing text about the prompting word or words. Place the cursor (arrow) on black text or white space within the popup to clear the popup from the screen. The popup contains no functionality.

Click on a word or words with a *solid underline* in the list of Attributes (only a few in this list) or within a Help Topic to display a *window* containing text, typically considerably more than displayed in a popup. If the amount of text requires, the window will be scrollable. Also, the window has a menu bar and buttons that provide additional on-line Help functionality.

NOTE: Red text in a definition's content indicates that clarification, additional text, or future text development is needed.

To close a topic displayed as a window, take one of the following actions:

Click on the Close button (the "X", in the upper right hand corner);
OR
Click on File in the upper left corner, then click on Exit.

To keep the Help topic open but return to the formerly active window (the one in background behind the Help topic window), click inside or on the edge of that background window.

**ATTRIBUTES**

Agency Zip Code
Alias
Alias Entity Name
Alias Name
Alias Type
Batch Record Count
Bibliographic Reference
Bibliography Journal/Publisher Indicator
Bibliography Publication Abstract Text
Bibliography Publication Author(s)
Bibliography Publication Date
Bibliography Publication Document Location
Bibliography Publication Electronic Location
Bibliography Publication Ending Page
Bibliography Publication Journal Number
Bibliography Publication Journal or Publisher Name
Bibliography Publication Publisher Reference Id
Bibliography Publication Starting Page
Bibliography Publication Title
Bibliography Publication Type
Bibliography Publication Volume Number
Borehole
Borehole Diameter
Borehole Diameter Unit Code
Casing
Casing Inside Diameter
Casing Inside Diameter Unit Code
Casing Material Type Code
Casing Maximum Diameter
Casing Maximum Diameter Unit Code
Casing Thickness
Casing Thickness Unit Code
Characteristic
Characteristic Group
Characteristic Group Description
Characteristic Group Keyword 1
Characteristic Group Keyword 2
Characteristic Group Keyword 3
Characteristic Group Keyword 4
Characteristic Group Name
Characteristic Lab ID
Characteristic Name
Characteristic Permitted Value Name
Characteristic Permitted Value Description
Characteristic Procedure Required Indicator
Characteristic Result CAS Number

Characteristic Sample Fraction Required Indicator
Characteristic Type
Characteristic Type Category
Characteristic Type Subcategory
Characteristic UOM Type Code
Characteristic Usage
Code
Code Description
Code Format
Code Length
Code Type
Code Type Description
Combined Code Table
Congressional District Number
Continuing Load Process Message
Coordinate Referencing System
County Name
Decimal Lat (Latitude)
Decimal Long
E1 Agency Name
E1 Project Contact Person
E1 Project End Date
E1 Project Identification Code
E1 Project Name
E1 Project Program Code
E1 Project Purpose
E1 Project Quality Assurance (QA) Level
E1 Project Start Date
E1 Project Status Code
E3 Characteristic Lab ID
E3 Characteristic Result CAS Number
E3 Characteristic Result Name
E3 Field Activity Comment
E3 Field Activity End Date
E3 Field Activity End Time
E3 Field Activity Lower Depth Quantity
E3 Field Activity Reference Point
E3 Field Activity Start Date
E3 Field Activity Start Time
E3 Field Activity Type
E3 Field Activity Upper Depth Quantity
E3 Lab Result Name
E3 Lab Sample Name
E3 Method Sample 1 Code
E3 Method Sample 2 Code
E3 Method Sample 3 Code

E3 Method Sample 4 Code
E3 Parameter Code
E3 Project Identification Code
E3 Project Station Name
E3 Rejected Result Indicator
E3 Result Analysis Date
E3 Result Analysis Time
E3 Result Analytical Method
E3 Result Comment
E3 Result Confidence Level Percent Measure
E3 Result Data Qualifier Code
E3 Result Instrument Value
E3 Result Reported Value
E3 Result Sample Fraction
E3 Result “Stored As” Value
E3 Result Unidentified Species Code
E3 Result Validation Method Description
E3 Result Value Description (Comment)
E3 Sample Chain of Custody Flag
E3 Sample Chemical Preservation Method
E3 Sample Composite Flag
E3 Sample Identification Number
E3 Sample Matrix
E3 Sample Refrigerated Temperature Quantity
E3 Sample Replicate Flag
E3 Sample Source
E3 Sample Type Code
E3 Sequence Number
E3 Station Identification Code
E3 Taxon Result ITIS Code
E3 Taxon Result Name
E3 Taxon Sample ITIS Code
E3 Taxon Sample Name
E3 Tissue Sample Type Description
E3 UOM Field Activity Short Form Name
E3 UOM Result Short Form Name
E3 UOM Sample Short Form Name
Ecology Interaction Description
Ecology Interaction Type
Ecology Person
Ecology Person Email Address
Ecology Person FAX Number
Ecology Person First Name
Ecology Person Honorific Name
Ecology Person Last Name
Ecology Person Middle Initial

Ecology Person Phone Extension Number
Ecology Person Phone Number
EIM Interface System
EIM Query/Report System
EIM System
EIM System Component
Elevation
Elevation Accuracy Level (see Vertical Accuracy Level)
Elevation Collection Method (see Vertical Collection Method)
Elevation Datum (see Vertical Datum)
Elevation Reference (see Vertical Reference)
Elevation Unit Code
Eligible to be Loaded
EPA Identifier
Error Message
Facility/Site
Facility/Site Components
Facility/Site Identification System
Facility/Site Identifier
Facility/Site Name
Facility/Site Search Radius (see Search Radius)
Federal Program ID
Field Activity
Field Activity Comment
Field Activity End Date
Field Activity End Time
Field Activity Grouping
Field Activity Grouping Reason Description
Field Activity Lower Depth Quantity
Field Activity Reference Point
Field Activity Start Date
Field Activity Start Time
Field Activity Type
Field Activity Upper Depth Quantity
Fill
Fill Material Type Code
Fill Thickness
Fill Thickness Unit Code
Fill Volume
Fill Volume Unit Code
Geographic Area
Geographic Area Name
Geographic Area Type
Geographic Area GIS Feature ID
Geographic Area GIS Theme Name
Geographic Position

GIS
GIS Verified Flag
Hole (see Borehole)
Horizontal Accuracy Level
Horizontal Collection Method
Horizontal Collection Source
Horizontal Datum
Interaction
Interaction End Date
Interaction Start Date
Interaction Status
Interface Batch Number
Interface Delete Status Options
Interface Load Process Message
Interface Load Status Code
Interface Percent Progress Message
Interface Search Record Count
Interface System Name
Laboratory
Laboratory Name
Lab Phone Number
Lab Result Name
Lab Sample Name
Last Update Time/Date Stamp
Last Update User ID
Lat Decimal (see Decimal Lat
Lat Degree Number
Lat Minute Number
Lat Second Number
Lat/Long
Legislative District Number
LIMS
Linked Activities Indicator
Location Accuracy Level (see Horizontal Accuracy Level)
Location Address
Location City
Location Collection Method (see Horizontal Collection Method )
Location Collection Source (see Horizontal Collection Source )
Location Congressional District Number (see Congressional District)
Location Coordinate System (see Coordinate Referencing Systems)
Location County (see County)
Location Datum (see Horizontal Datum)
Location Description
Location Latitude Degree Number (see Lat Degree Number)
Location Latitude Minute Number (see Lat Minute Number)
Location Latitude Second Number (see Lat Second Number

Location Legislative District Number (see Legislative District Number)
Location Longitude Degree Number (see Long Degree Number)
Location Longitude Minute Number (see Long Minute Number)
Location Longitude Second Number (see Long Second Number)
Location Position (see Geographic Position)
Location Region (see Region)
Location State
Location WRIA Inventory Number (see WRIA Inventory Number)
Location Zip Code
Long Decimal Number (See Decimal Long )
Long Degree Number
Long Minute Number
Long Second Number
Measurement
Measuring Point (see Well Station Measuring Point)
Method
Method Category
Method Code
Method Description
Method Source
MS Access Path
Observation
Opening
Opening Description
Opening Length
Opening Length Unit Code
Opening Material Type Code
Opening Mesh Size
Opening Mesh Size Unit Code
Opening Type Code
Opening Width
Opening Width Unit Code
Parent Taxon IT IS Code
Password
Position (see Geographic Position)
Processed
Project(s)
Project Access Level
Project End Date
Project Identification Code
Project Lab Cost Estimate
Project Lead
Project Lead First Name
Project Lead Last Name
Project Name
Project Program Code

Project Purpose
Project Quality Assurance (QA) Description
Project Quality Assurance (QA) Level
Project Resource Estimate
Project Results Description
Project Special Requirements
Project Start Date
Project Station
Project Station Name
Project Status Code
Project User Group
Project User Group Name
Protected Fields
Quality Assurance Description (for Project) - (see Project Quality Assurance Description )
Quality Assurance Level (for Project) – (see Project Quality Assurance Level )
Range
Range Direction Code
Range Number
Reference Tables
Region
Region Code
Rejected Result Indicator
Reporting System
Result
Result Analysis Date
Result Analysis Time
Result Comment
Result Confidence Level Percent Measure
Result Data Qualifier Code
Result Instrument Value
Result Reported Value
Result Sample Fraction
Result “Stored As” Value
Result Unidentified Species Code
Result Validation Method Description
Result Value Description (Comment)
Result Value Measure (see Result “Stored As” Value Measure )
Sample
Sample Chain of Custody Flag
Sample Chemical Preservation Method
Sample Composite
Sample Composite Description
Sample Composite Flag
Sample Composite Interval
Sample Composite Type
Sample Fraction (see Result Sample Fraction )

Sample Identification Number
Sample Matrix
Sample Refrigerated Temperature Quantity
Sample Replicate Flag
Sample Source
Sample Split
Sample Split Comment (Reason)
Search Radius
Section
Section Number
Select All Columns Indicator
Select All Indicator
Single Screen Set
Skipper
SPCS
SPCS X Coordinate
SPCS Y Coordinate
SPCS Zone Code
Station(s)
Station Alias
Station Alias Code
Station Alias Type
Station Capped Flag
Station Dredged Flag
Station Identification Code
Station Index Number
Station Type
Station Name
Station River Mile
Station Spatial Type
Station Status
Station Waterbody ID
STR
STR Quarter Code 1
STR Quarter Code 2
STR Quarter Code 3
Study Area
Study Area Activation Date
Study Area Description
Study Area Name
Study Area Type
Study Area Spatial Type Indicator
Successfully Loaded
System User ID
System User ID (Security System)
System User Name (Security System)

Table Name (see Access Table Name)
Taxon
Taxon Function Description
Taxon ITIS Code
Taxon (Parent) ITIS Code (same as Parent Taxon IT IS Code)
Taxon Level
Taxon Name
Taxon Tolerance Description
Tissue Based Indicator
Tissue Type
Tissue Type Description
Tissue Type Kingdom
Tissue Type Organ System
Township
Township Direction Code
Township Number
Underground Unit
Underground Unit Code
Underground Unit Local Name
Underground Unit Name
Underground Unit State Code
Underground Unit Type
Unit of Measure (UOM)
UOM Description
UOM Field Activity Short Form Name
UOM Result Short Form Name
UOM Sample Short Form Name
UOM Short Form Name
UOM Type
User Location Verified Flag
UTM
UTM X Coordinate
UTM Y Coordinate
UTM Zone Code
Version
Vertical Accuracy Level
Vertical Collection Method
Vertical Datum
Vertical Measure (see Elevation)
Vertical Measure Unit Code (See Elevation Unit Code)
Vertical Reference
Waterbody
Well
Well Identification Number
Well Interval
Well Interval Depth to Bottom (Lower Interval)

Well Interval Depth to Top (Upper Interval)
Well Interval Depth Unit Code
Well Interval Measuring Point
Well Interval Measuring Point Description
Well Interval Measuring Point Height
Well Interval Measuring Point Height Unit Code
Well Interval Type Code
Well Log
Well Log Conducted Date
Well Log Location Description
Well Log Report Format Code
Well Log Type Code
Well Pump
Well Pump Depth
Well Pump Depth Unit Code
Well Pump Efficiency
Well Pump Installation Date
Well Pump Intake Depth
Well Pump Intake Depth Unit Code
Well Pump Location Reference Point
Well Pump Model Name
Well Pump Manufacturer Name
Well Pump Power Source
Well Pump Rated Capacity
Well Pump Rated Capacity Unit Code
Well Pump Rated Power
Well Pump Rated Power Unit Code
Well Pump Rated RPM
Well Pump Removal Date
Well Pump Serial Number
Well Pump Total Head
Well Pump Total Head Unit Code
Well Pump Type Code
Well Station
Well Station Aquifer Test Indicator Flag
Well Station Comment
Well Station Completed Depth
Well Station Completed Depth Unit Code
Well Station Completion Type Code
Well Station Construction End Date
Well Station Construction Method Code
Well Station Construction Start Date
Well Station Development Method Code
Well Station Disinfected Indicator
Well Station Flow Indicator
Well Station Gradient Type Code

Well Station Hole Depth
Well Station Hole Depth Unit Code
Well Station Identification Number
Well Station Indicator Flag
Well Station Measuring Point
Well Station Measuring Point Description
Well Station Measuring Point Height
Well Station Measuring Point Height Effective Date
Well Station Measuring Point Height End Date
Well Station Measuring Point Height Unit Code
Well Station Measuring Point Name
Well Station Status Code
Well Station Use Code
Well Station Water Primary Use Code
Well Tag ID (see Well Identification Number )
Wellhead Protection Area Name
WRIA
WRIA Inventory Number

# EIM ATTRIBUTES

**Access Table Name**
The name of the file in which you wish to store an Access table. This text box is contained in the Save As Dialog Box which is displayed when the user clicks on the Export to Access Pushbutton in the **Advanced Report Builder Screen.**

Example: 06-14-99_Sample 24

Format: 64 alpha/numeric characters

**Activities/Results**
Activities/Results is one of the six EIM System Components.

The term "Activities" refers to field activities. The term "Results" refers to the information derived from the field activities.

**Advanced Query Indicator**
A flag (i.e. a check mark [ ] by which the user indicates that he or she wishes the system to display the **Advanced Report Builder Dialog Box** in order to customize a report.

**Agency**
A State, Federal, tribal, local, academic, commercial, or other group of interest to Ecology as a supplier or consumer of environmental monitoring or natural resource information. Within Environmental Information Management (EIM) an Agency is of interest when it participates in one or more Projects in one or more of a variety of roles, such as sampling or funding. Agencies may also exist without a project assignment.

An agency may sponsor and/or initiate Projects or Surveys.

**Agency Address Line 1**
The first of up to two lines of the address for the Agency , if appropriate. This will generally be the primary address line.

Example: 15 West Yakima Avenue

Format: 40 alpha/numeric characters

**Agency Address Line 2**
The second of up to two lines of the address for the Agency , if appropriate.

Example: Suite 200

Format: 40 alpha/numeric characters

**Agency City**
The city of the address for the Agency.

Example: Yakima

Format: 25 alpha/numeric characters

**Agency Country**
The country of the address for the Agency.

Example: United States or US

Format: 20 alpha/numeric characters

**Agency Email Address**
The internet address for the Agency. This will commonly correspond to the World Wide Web site address for the Agency.

Example: www.wa.gov/ecology

Format: 20 alpha/numeric characters

**Agency Name**
Required Field

The formal, full-length name of the Agency which is the sponsor or initiator of the Project.

Examples: U.S. Environmental Protection Agency
Dept. of Ecology

Format: 60 alpha/numeric characters

**Agency Phone Number**
The main switchboard phone number for the Agency used for contact purposes when information is required from the Agency about its involvement in a project.

Examples: (360)407-6000

Format: 15 alpha/numeric characters

NOTE: although there is no format requirement, the preferred format is (xxx)yyy-zzzz.

**Agency PO Box Number**
The post office box number used as part of the address for the Agency, if appropriate.

Examples: PO Box 47600

Format: 10 alpha/numeric characters

**Agency Role**
Defines the role that an Agency may play on a specific Project. The Agency may have multiple roles defined in this way.

**Agency Role Contact**
The name of the primary person leading the Agency's involvement in the Project.

Enter the person's first name, then last name.

Example: Tim Goldsmith

Format: 40 alpha/numeric characters

**Agency Role Contact Phone Number**
The phone number of the Agency Role Contact.

Example: (360)407-1234

Format: 15 alpha/numeric characters

**Agency Role Type**
The role being played by an Agency for a specific Project.

Permitted Values:
Funding
Sampling
Analysis
QA
Other

Format: 15 alpha/numeric characters

**Agency State**
The abbreviation of the state of the address for the Agency.

Examples: WA BC DC

Format: 2 alpha/numeric characters

**Agency Zip Code**
The post office ZIP code of the address for the agency.

Examples: 98504-7600

Format: 10 alpha/numeric characters

NOTE: although there is no format requirement, the preferred format is xxxxx-xxxx.

**Alias**
An alternate name for a characteristic or taxon. Characteristics will often have multiple names, common names, official codes, and so on. Each characteristic has a single name, Characteristic Name, when entered into the EIM System. Each alternate name is stored as an alias.

**Alias Entity Name**
A system-generated attribute composed of the following two parts, separated by a colon (:):

1. The name of the EIM System entity, either Characteristic or Taxon, with which an alias is associated. This name is followed by a colon (:).

2. The Characteristic Name or Taxon Name with which an Alias is associated.

Examples: Characteristic: (-)-Loliolide Taxon: Achelia chelata

**Alias Name**
Required Field – for an alias

The alternative name/code for a characteristic or taxon.

Examples: Rainbow trout – alias for the taxon Oncorhynchus mykiss
DDE – alias for the characteristic p,p-DICHLORODIPHENYLDICHLOROETHYLENE

Format: 40 alpha/numeric characters

**Alias Type**
Required Field – for an alias

The name of the type of alternative naming scheme or generic category alias for a characteristic or taxon.

Select from list of permitted values.

Example: Common Name
Format: 30 alpha/numeric characters

**Batch Record Count**
The number of records in a batch identified by its Interface Batch Number.

**Bibliographic Reference**
A citation to provide additional information about either a monitoring project or a field or analytical method, including the location of additional information if appropriate.

**Bibliography Journal/Publisher Indicator**
An indicator as to whether the name that appears in the text box for the attribute Bibliography Journal or Publisher Name is name of a Journal or a Publisher.

Click on the appropriate radio button ("Journal" or "Publisher") to select the proper indicator.

NOTE: When you click on the radio button for "Journal", the following two fields become active, required fields:

Bibliography Publication Volume Number
Bibliography Publication Journal Number

**Bibliography Publication Abstract Text**
A summary of the Bibliographic Reference.

Format: Approximately 1000 alpha/numeric characters (stored in the database as four separate attributes of 254 characters each)

**Bibliography Publication Author(s)**
Required Field

The name(s) of the author(s) of the cited journal or publication.

Example: American Public Health Association, American Water Works Association, and Water Environment Foundation

Format: 254 alpha/numeric characters

**Bibliography Publication Date**
Required Field

The date on which the cited journal or publication was first published. If only the year is available, then set the date to January 1st of that year.

Examples: 01-01-1993
07-18-1997

Format: MM-DD-YYYY
NOTE: You *must* enter the hyphens; otherwise the system will "beep" you.

**Bibliography Publication Document Location**
Required Field

The physical location of any hard copy of the reference document.

Examples: WA Dept. of Ecology library
EILS Section

Format: 100 alpha/numeric characters

**Bibliography Publication Electronic Location**
The full path name of the location of any electronic copy of the document reference.

Examples: MS Outlook, Public Folders, ECY, Info. Tech. Policies, GIS Standards for Spatial…7/6/98
H:\xxxx461\biog\file.doc
Russ Darr's PC: C:\ BIBLIOGRAPHY\file.doc

Format: 100 alpha/numeric characters

**Bibliography Publication Ending Page**
The ending page number of the journal or publication in which the reference was published.

Example: 14 1002

Format: 4 numeric characters; 0 decimal places

**Bibliography Publication Journal Number**
Required Field – only when the "Journal" radio button is active for the attribute Bibliography Journal/Publisher Indicator.

The number of the journal within a given volume in which the reference was published.

NOTE: This field is not active when the "Publisher" radio button is active.

Example: 5 (would be the entry for Environmental Science & Technology Volume 32 Number 5)

Format: 3 numeric characters; 0 decimal places

**Bibliography Publication Journal or Publisher Name**
The name of the official journal in which the reference was published, if available, or of the publisher.

Example: American Chemical Society (publisher of Environmental Science & Technology)

Format: 120 alpha/numeric characters

**Bibliography Publication Publisher Reference Id**
An identification number assigned to the document by the publisher. This might be the ISBN number for a standard text, or the Ecology publication number for an Ecology-produced document.

Examples: 0013-936X
(ISSN of Environmental Science & Technology)

98-500
(Ecology publication number for:
Solid Waste in Washington State, Sixth Annual Report; 1/98)

Format: 40 alpha/numeric characters

**Bibliography Publication Starting Page**
The starting page number of the journal or publication in which the reference was published.

Examples: 8 102

Format: 4 numeric characters; 0 decimal places

**Bibliography Publication Title**
Required Field

The title of the publication being cited.

Example: Field Samples and Measurement Protocols for the Watershed Assessments Section

Format: 254 alpha/numeric characters

**Bibliography Publication Type**
**Required Field**

Indicates the type of the reference being cited.

Permitted Values:
REPORT
QA DOC
METHOD
OTHER

Format: 8 alpha/numeric characters

**Bibliography Publication Volume Number**
**Required Field –** only when the "Journal" radio button is active for the attribute Bibliography Journal/Publisher Indicator.

The volume number of the journal in which the reference was published.

NOTE: This field is not active when the radio button for "Publisher" is active.

Example: 13 (would be the entry for Scientific American Volume 13 Number 5)

Format: 3 numeric characters; 0 decimal places

**Borehole**
A cavity in the ground constructed for the purpose of creating a well.

**Borehole Diameter**
Required Field if the Well Interval is HOLE

The diameter of the borehole of the specific Well Interval being measured.

Units are expressed using the Borehole Diameter Unit Code.

Example: 6.750

Format: 3 numeric characters and 3 decimal places

*See also*
Casing Maximum Diameter

**Borehole Diameter Unit Code**
Required Field if the Well Interval is HOLE

Units in which the Borehole Diameter is expressed.

Values: FT = Feet
M = Meters
CM = Centimeters
IN = Inches

Format: 2 alpha/numeric characters

**Casing**
A liner placed in a borehole to prevent entry of loose rock, gas, or liquid into the borehole or to prevent loss of circulation liquid into porous, cavernous, or crevassed ground. Liners may be constructed of sections of tubing, screwed together, or concrete poured in place.

**Casing Inside Diameter**
The diameter inside the casing in a well interval.

Units are measured using the Casing Inside Diameter Unit Code .

Example: 5.3

Format: 3 numeric characters and 2 decimal

**Casing Inside Diameter Unit Code**

The units in which the Casing Inside Diameter in a well interval is expressed.

Values: CM = Centimeters
IN = Inches

Format: 2 alpha/numeric characters

**Casing Material Type Code**
Required Field

Identifies the material from which a well casing is made.

Select from list of permitted values.

Examples: Brass or bronze

Galvanized iron
Brick
Fiberglass
Other Material
Fiberglass, other plastic, threaded

Format: 4 alpha/numeric characters

NOTE: System converts each item from list of permitted values to a four-character code (e.g. BRAS = Brass or bronze; NGLU = Fiberglass, other plastic, threaded)

**Casing Maximum Diameter**
The measure of the diameter of the casing that has the largest diameter within the well.

Units are expressed using the Casing Maximum Diameter Unit Code.

Example: 18.500

Format: 3 numeric characters and 2 decimal places

*See also*
Borehole Diameter

**Casing Maximum Diameter Unit Code**
The units in which the Casing Maximum Diameter is expressed.

Values: CM = Centimeters
IN = Inches

Format: 2 alpha/numeric characters

**Casing Thickness**
The measure of the thickness of the casing material used for a well interval.

Units are measured using the Casing Thickness Unit Code.

Example: .25

Format: 1 numeric character and three decimal places

**Casing Thickness Unit Code**
The units in which the Casing Thickness is expressed.

Values: CM = Centimeters
IN = Inches
MM = Millimeters

Format: 2 alpha/numeric characters

**Characteristic**
The name of the parameter that is sampled for or measured in the environment.

Examples: Fish fork length
Color
Stream width
Salinity
Chromium
Hexane, 3-Ethyl-

**Characteristic Group**
A grouping of characteristics for the purpose of conducting multiple samplings /observations on the group. The characteristics selected for the group may not necessarily be related, but they are grouped so that if, for example, routine samples are taken for 8 characteristics every month, creation of a group will result in less data entry, as only the group will have to be selected instead of each individual characteristic.

Example: John Tooley's Watershed Assessment Characteristics

**Characteristic Group Description**
Required field if Characteristic Group is associated with a Project

Brief description of the Characteristic Group that should include its purpose and primary purpose.

This description may be searched on any of four key words. Refer to Characteristic Group Keywords 1-4 (definition is the same for each).

Example: Field measurements routinely collected by the Ambient Monitoring system (AMS) River and Stream Group

Format: 254 alpha/numeric characters

**Characteristic Group Keyword 1**
One of four key words entered by the user from the Characteristic Group Description at the time a Characteristic Group is INSERTED or UPDATED. Then, in subsequent Characteristic Group searches, users may enter one to four key words to search for characteristic groups with matching key words in their Characteristic Group Descriptions.

Example: Ambient

Format: 15 alpha/numeric characters

**Characteristic Group Keyword 2**
One of four key words entered by the user from the Characteristic Group Description at the time a Characteristic Group is INSERTED or UPDATED. Then, in subsequent Characteristic Group searches, users may enter one to four key words to search for characteristic groups with matching key words in their Characteristic Group Descriptions.

Example: River

Format: 15 alpha/numeric characters

**Characteristic Group Keyword 3**
One of four key words entered by the user from the Characteristic Group Description at the time a Characteristic Group is INSERTED or UPDATED. Then, in subsequent Characteristic Group searches, users may enter one to four key words to search for characteristic groups with matching key words in their Characteristic Group Descriptions.

Example: Stream

Format: 15 alpha/numeric characters

**Characteristic Group Keyword 4**
One of four key words entered by the user from the Characteristic Group Description at the time a Characteristic Group is INSERTED or UPDATED. Then, in subsequent Characteristic Group searches, users may enter one to four key words to search for characteristic groups with matching key words in their Characteristic Group Descriptions.

Example: Field Measurements

Format: 15 alpha/numeric characters

**Characteristic Group Name**
The name assigned to the group by the user who creates the set of characteristics to be known as a characteristic group.

Example: AMS Field Measurements
Format: 40 alpha/numeric characters

**Characteristic Lab ID**

One of two types of identifiers provided by the Laboratory for the characteristic:1. Modified version of the E3 Characteristic Result CAS Number. The modified version has no hyphens between the segments of the Chemical Abstract Service (CAS) Number.

OR

2. An alpha/numeric code assigned by the Laboratory to identify a characteristic that is not included in the CAS numbering system.

Example: 30002009 (modified version of E3 Characteristic Result CAS Number)
NO2/NO3 (Laboratory-generated)

Format: 12 alpha/numeric characters

NOTE: To use an Internet chemical search engine to find the CAS Number, refer to: How to Search for a Characteristic in the Environmental Information Management System

**Characteristic Name**

Required Field

The name of the characteristic reported for the result. The standard names for characteristics in the EIM System have been defined as those used in the Manchester Lab's LIMS system.

Example: Cadmium – if sample was analyzed to determine its cadmium content.

Format: 60 alpha/numeric characters

**Characteristic Permitted Value**

Required Field

A valid value for a given characteristic.

Examples: True
False
0
1

Format: 12 alpha/numeric characters

**Characteristic Permitted Value Description**
Additional text that further describes the Characteristic Permitted Value .

Example: Indicates the presence of taxa (for a Characteristic Permitted Value of "True")

Format: 60 alpha/numeric characters

**Characteristic Procedure Required Indicator**
A code indicating whether an analytical procedure is required for a specific characteristic. This is used primarily for chemical characteristics.

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES, required); lack of a = "N" (=NO, not required).

**Characteristic Result CAS Number**
The Chemical Abstract Service number defined nationally for known chemical elements and compounds. This code for the characteristic is included on the characteristic directly, although it is truly a type of 'alias' because of its significance to the system users and within the LIMS system.

Example: 30-002-009

Format: 12 alpha/numeric characters

**Characteristic Sample Fraction Required Indicator**
A code indicating whether a sample fraction (refer to Result Sample Fraction ) is required for a specific characteristic. This is used primarily for chemical characteristics.

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES, required); lack of a = "N" (=NO, not required).

**Characteristic Type**
An aggregation of characteristics that are related in some way, such as metals or carcinogenic organic compounds.

More specific to the EIM System, it is a text description of a Characteristic that is displayed as a row in a list box and is composed of the following two attributes:

Characteristic Category
Characteristic Subcategory

| Example: | Category | Subcategory |
|---|---|---|
| | Chemical | Biochemical Measures |

The entries for these two attributes form the Characteristic Type for the Characteristic named Glass Fiber.

**Characteristic Type Category**
Required Field

A high level categorization of related characteristics.

Permitted Values:
Biological
Chemical
Microbial
Physical

Format: 12 alpha/numeric characters

**Characteristic Type Subcategory**
Required Field

A lower level categorization of the type of characteristic than that of Characteristic Type Category.

Example: Halogens

Format: 30 alpha/numeric characters

**Characteristic UOM Type Code**
Required Field

A code indicating which Units of Measure (UOM) are valid when recording results for a specific characteristic. This is used primarily for chemical characteristics.

Examples: Volume
Mass
Time
Length

Format: 10 alpha/numeric characters

**Characteristic Usage**
Indicates whether the characteristic is designated for field use, lab use, or both. A blank space or "no value" is also permitted.

Permitted Values:
Blank Space
Field
Lab
Field and Lab

Format: 13 alpha/numeric characters

**Code**
A code identifier of each option for a subject contained in the Combined Code Table in the system. There is a "Code" associated with each "Code Description".

| | Code Type | Code | Code Description |
|---|---|---|---|
| Examples: | COUNTY | 01 | Adams |
| | HDATUM | 01 | North American Datum 1927 - NAD27 |

**Code Description**
A text identifier and description of each option for a subject contained in the Combined Code Table in the system. There is a "Code Description" associated with each "Code".

| | Code Type | Code | Code Description |
|---|---|---|---|
| Examples: | COUNTY | 01 | Adams |
| | HDATUM | 01 | North American Datum 1927 - NAD27 |

**Code Format**
Identifies whether the characters in a "Code Type" of the Combined Code Table must be numeric (N) or text (T).

**Combined Code Table Attributes**

| | Code Type | Code Type Description | Code Length | Code Format |
|---|---|---|---|---|
| Examples: | COUNTY | County Codes | 2 | N |
| | | 01 Adams | | |
| | | 39 Yakima | | |
| | REGION | WDOE Region | 6 | T |
| | | ERO Eastern Regional Office | | |
| | | NWRO Northwest Regional Office | | |

**Code Length**
The number of characters for a "Code Type" of the Combined Code Table.

**Combined Code Table Attributes**

| | Code Type | Code Type Description | Code Length | Code Format |
|---|---|---|---|---|
| Examples: | COUNTY | County Codes | 2 | N |
| | | 01 Adams | | |
| | | 39 Yakima | | |
| | REGION | WDOE Region | 6 | T |
| | | ERO Eastern Regional Office | | |
| | | NWRO Northwest Regional Office | | |

**Code Type**
A code identifier of each subject in the Combined Code Table in the system. There is a "Code Type" associated with each "Code Type Description".

| | Code Type | Code Type Description |
|---|---|---|
| Examples: | COUNTY | County Codes |
| | HDATUM | The point line surface used a reference (Horizontal Datum) |

*See also*
Code
Code Description

**Code Type Description**
A text identifier and description of each subject in the Combined Code Table in the system. There is a "Code Type Description" associated with each "Code Type".

| | Code Type | Code Type Description |
|---|---|---|
| Examples: | COUNTY | County Codes |
| | HDATUM | The point line surface used a reference (Horizontal Datum) |

*See also*
Code
Code Description

**Combined Code Table**
The Combined Code Table contains a list of available options for a particular subject (e.g. County, Horizontal Datum, SIC). These options are presented to the system user in the form of a list box from which the user may select the appropriate item(s).

Each subject of the Combined Code Table is identified by a "Code Type" and a "Code Type Description"

| | Code Type | Code Type Description |
|---|---|---|
| Examples: | COUNTY | County Codes |
| | HDATUM | The point line surface used as reference (Horizontal Datum) |

Each option for a subject is identified by a "Code" and a "Code Description".

| | Code Type | Code | Code Description |
|---|---|---|---|
| Examples: | COUNTY | 01 | Adams |
| | HDATUM | 01 | North American Datum 1927 - NAD27 |

**Congressional District Number**
No entry needed. The program "Skipper" will populate this field.

The number and associated text description of the Congressional District in which the Station is located. If you wish to enter a Congressional District Number for a Station, click on the prompt and choose the appropriate one from the drop-down list box of the Congressional District Combined Code Table.

Range: 01 - 09

Example: 01 Congressional District No. 1

**Continuing Load Process Message**
A horizontal bar that identifies the portion of result records that have been processed during a load process. The bar increases as the Processed number increases.

**Coordinate Referencing System**
Required Field

User selects one of four Coordinate Referencing Systems to identify the *current basis* of the coordinates of the Station. The current basis may not be the same as the original basis if a more accurate basis has been entered subsequent to that of the original.

The four coordinate referencing systems are:

| | |
|---|---|
| LAT/LONG: | Latitude/Longitude -- The agency standard coordinate referencing System. |
| SPCS | (Washington) State Plane Coordinate System |
| STR | Section Township Range Grid System |
| UTM | Universal Transverse Mercator Grid System |

NOTE: If you change the Coordinate Referencing System when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**County Name**
No entry needed. The program "Skipper" will populate this field.

The name of the county and its associated two-digit code in which the Station is located.

If you wish to enter a County Name for a Station, click on the prompt and choose the appropriate code from the drop-down list box of the Combined Code Table named **County**.

NOTE: If you wish to use a County Name for Report Selection purposes, click on the down arrow next to the text box; then, click on the appropriate County Name from the drop-down list box.

| | | |
|---|---|---|
| Examples: | 01 | Adams |
| | 39 | Yakima |

**Decimal Lat**
Required if using Latitude/Longitude Coordinate Referencing System and not entering Degrees (Lat Degree Number), Minutes (Lat Minute Number), and Seconds (geo)

The decimal representation of the latitude of the Station location where:

decimal degrees = degrees + minutes/60 + seconds/3600

Example: 73.9875 = 73 59 ’ 15”

Range: 45.000000 - 49.999999

Format: 2 numeric characters and 6 decimal places

NOTE: If you change the Decimal Latitude when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Decimal Long**
(Decimal Longitude)

The decimal representation of the longitude of the Station location where

decimal degrees = degrees + minutes/60 + seconds/3600

Example: 117.9875 = 117 59’ 15”

Range: 116.000000 - 125.999999

Format: 3 numeric characters and 6 decimal places

NOTE: If you change the Decimal Longitude when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**E1 Agency Name**
The formal, full-length name of the Agency which is the sponsor or initiator of the E1 Project for which records of a batch were entered into the Interface System.

**E1 Project Contact Person**
Required Field

The Ecology staff person designated as the one responsible for (Project Lead ) or the person knowledgeable about the E1 Project for which records of a batch were entered into the Interface System.

*See also*
Project Lead First Name

Project Lead Last Name

**E1 Project End Date**
The date on which an E1 Project was completed for which records of a batch were entered into the Interface System. Typically, this should be upon completion of any published reports.

Example: 12-12-1996

Format: MM-DD-YYYY

NOTE: You *must* enter the hyphens; otherwise an error message will appear.

**E1 Project Identification Code**
EIM Required Field

The identification code (combination of text and numbers) used by the Project Lead to *uniquely* identify the E1Project for which records of a batch were entered into the Interface System.

Examples: EILS567 SED8809

Format: 8 alpha/numeric characters

**E1 Project Name**
EIM Required Field

The name assigned by the Project Lead to the E1 Project for which records of a batch were entered into the Interface System .

Examples: Radioactive poisoning in Hanford employees
DDT measurements for fish in the Lower Puget Sound area

Format: 60 alpha/numeric characters

**E1 Project Program Code**
The code which identifies the Ecology Program which is primarily responsible for the E1 Project for which records of a batch were entered into the Interface System.

Examples: HWTUR EILS

Format: 10 alpha/numeric characters

**E1 Project Purpose**
Required Field

A summary description of the purpose of, or the hypothesis to be tested by the E1 Project for which records of a batch were entered into the Interface System . It should include the reason(s) for initiating the project, plus its goals and expectations.

Example: This project will examine the amounts of DDT found in clam tissue samples in the Lower Puget Sound area. The intentions are to measure the effect the spill has had on the fish in the area.

Format: 254 alpha/numeric characters

**E1 Project Quality Assurance (QA) Level**
Required Field

A number reflecting the perceived quality of the data associated with the E1 Project for which records of a batch were entered into the Interface System.

Values: 1 – 4

Each Quality Assurance Level (QAL) is described below. In order to be rated at a given level, the criteria for both Planning and Report documents must be met.

**Level 1** **Planning**: Informal QA Documentation or
No Documentation available
**Report**: Data report/spreadsheet

A QA *planning document* includes a description of the project, statements of project objectives, detailed sampling design including rational and sampling locations, and descriptions of, or references to, sampling, analysis and quality control procedures.

**Level 2** **Planning**: Basic/Boiler-Plate or Generic QA Planning Document
**Report**: Informal/summary project report available

A QA planning document includes a description of the project, statements of project objectives, detailed sampling design including rational and sampling locations, and descriptions of, or references to, sampling, analysis and quality control procedures.

**Level 3** **Planning**: QAPP or Equivalent
**Report**: Formal project report

A *Quality Assurance Project Plan (QAPP)* must follow the guidance in Ecology Document 91-16, Guidelines and Specifications for Preparing Quality Assurance Project

Plans and/or EPA Document 841-B-96-003, The Volunteer Monitor's Guide to Quality Assurance Project Plans.

A *formal project report* is a document describing project objectives, procedures, results, conclusions and **assessment of the quality of the data**.

Both the QAPP and the formal project report must be available to the user.

Bibliographic citations should be provided (*see **Project Bibliography Window**).*

**Level 4** **Planning**: Approved QAPP
**Report**: Peer reviewed project report

A *Quality Assurance Project Plan (QAPP)* must follow the guidance in Ecology Document 91-16, Guidelines and Specifications for Preparing Quality Assurance Project Plans and/or EPA Document 841-B-96-003, The Volunteer Monitor's Guide to Quality Assurance Project Plans.

A *formal project report* is a document describing project objectives, procedures, results, conclusions and **assessment of the quality of the data**. A *peer reviewed project report* means the report was checked or reviewed for accuracy and completeness by a supervisor or colleague with appropriate experience (does not require independent, outside scientific review, as for juried publications).

Both the QAPP and the formal project report must be available to the user.

Bibliographic citations should be provided (*see **Project Bibliography Window**).*

Examples:

Entering historical monitoring data; no formal QA documentation or project report is known. Assign QAL = 1

Ecology staff collects data during inspection, under a generic programmatic QAPP that covers typical inspections. Inspector writes report. Assign QAL = 2.

Multi-year watershed analysis, involving extensive monitoring, is supported by an approved QAPP. Formal project report is available. Assign QAL = 3. If report is peer reviewed, assign QAL = 4.

Intensive monitoring program associated with cleanup site is supported by an approved QAPP. Results exist, but there is no project report. Assign QAL = 1. When formal report is complete, change QAL = 3. When peer reviewed project report is completed, change QAL = 4.

Format: 1 numeric character

NOTE: Additional QA information/detail may be entered in the Project Quality Assurance Description.

**E1 Project Start Date**
Required Field

The date on which an E1 Project began for which records of a batch were entered into the Interface System .

Example: 12-12-1996

Format: MM-DD-YYYY

NOTE: You *must* enter the hyphens; otherwise an error message will appear.

**E1 Project Status Code**
The logical state describing the current condition of the E1 Project for which records of a batch were entered into the Interface System .

Values: Proposed
On Hold
Active
Data Completed
Completed

**E3 Characteristic Lab ID**
One of two types of identifiers provided by the Laboratory for the characteristic:

1. Modified version of the E3 Characteristic Result CAS Number. The modified version has no hyphens between the segments of the Chemical Abstract Service (CAS) Number.

OR

2. An alpha/numeric code generated and assigned by the Laboratory to identify a characteristic that is not included in the CAS numbering system.

Example: 30002009 (modified version of E3 Characteristic Result CAS Number)
NO2/NO3 (Laboratory-generated)

Format: 12 alpha/numeric characters

**E3 Characteristic Result CAS Number**

The Chemical Abstract Service number defined nationally for known chemical elements and compounds. This code for the characteristic is included on the characteristic directly, although it is truly a type of 'alias' because of its significance to the system users and within the LIMS system.

Example: 30-002-009

Format: 12 alpha/numeric characters

**E3 Characteristic Result Name**

EIM Required Field

The name of the characteristic reported for the E3 result. The standard names for characteristics in the EIM System have been defined as those used in the Manchester Lab LIMS system.

Examples: Cadmium – if sample was analyzed to determine its cadmium content.

Format: 60 alpha/numeric characters

**E3 Field Activity Comment**

Comments or descriptive information about the field activity that took place.

Example: Visibility was poor due to heavy rain.

Format: 254 alpha/numeric characters

**E3 Field Activity End Date**

The date that the field activity was completed.

Example: 11-17-1997

Format: MM-DD-YYYY

NOTE: You *must* enter the hyphens; otherwise an error message will appear.

**E3 Field Activity End Time**

The time that the field activity was completed.

Example: 04:24:16 16:03:00

Format: HH:MI:SS (hours, minutes, seconds) in military time
NOTE 1: You must enter the colons.
NOTE 2: If you enter only HH:MI, the system completes the entry with ":00".

**E3 Field Activity Lower Depth Quantity**

A measure associated with an activity that is normally conducted over or within a vertical depth range within the water column. It measures the distance from the surface to the *lower* boundary of the zone within which the activity is conducted or over which the activity is integrated.

This measure must be used in conjunction with a unit of measure, E3 UOM Field Activity Short Form Name.

Example: 10.00 (This would be the correct value to record if you were taking measurements in a section of the water column that started at 5 feet below the surface and ended 10 feet below the surface.

Format: 5 numeric characters and 2 decimal places

**E3 Field Activity Reference Point**

The reference point from which the depth that the field activity took place was measured.

Example: Stream Surface

Format: 30 alpha/numeric characters

**E3 Field Activity Start Date**

Required Field

The date that the field activity was begun.

Example: 11-17-1997

Format: MM-DD-YYYY
You must enter the hyphens.

**E3 Field Activity Start Time**

Required Field

The time that the field activity was begun.

Examples: 04:24:16 16:03:00

Format: HH:MI:SS (hours, minutes, seconds) in military time
NOTE 1: You must enter the colons.
NOTE 2: If you enter only HH:MI, the system completes the entry with ":00".

**E3 Field Activity Type**
The type of field activity being performed.

Values: Sample
Measurement
Observation

Format: 11 alpha characters

**E3 Field Activity Upper Depth Quantity**
A measure associated with an activity that is normally conducted over or within a vertical depth range within the water column. It measures the distance from the surface to the *upper* boundary of the zone within which the activity is conducted or over which the activity is integrated.

This measure must be used in conjunction with a unit of measure, E3 UOM Field Activity Short Form Name.

Example: 5.00 (This would be the correct value to record if you were taking measurements in a section of the water column that started at 5 feet below the surface and ended 10 feet below the surface.

Format: 5 numeric characters and 2 decimal places

**E3 Lab Result Name**
The formal name by which the laboratory which actually processed the samples is commonly known.

Example: Manchester Laboratory

Format: 60 alpha/numeric characters

*See also*
E3 Lab Sample Name
Laboratory Name

**E3 Lab Sample Name**
The formal name by which the laboratory to which the sample was originally sent is commonly known.

Example: Manchester Laboratory

Format: 60 alpha/numeric characters

*See also*
E3 Lab Result Name
Laboratory Name

**E3 Method Sample 1 Code**
The code for one of up to four sampling methods that can be associated with the sample. The code assigned to the procedure will be as listed in the reference document. The assignment of codes to methods will be managed by a central systems administration function.

Example: EPA351.2

Format: 10 alpha/numeric characters

**E3 Method Sample 2 Code**
The code for one of up to four sampling methods that can be associated with the sample. The code assigned to the procedure will be as listed in the reference document. The assignment of codes to methods will be managed by a central systems administration function.

Example: EPA351.2

Format: 10 alpha/numeric characters

**E3 Method Sample 3 Code**
The code for one of up to four sampling methods that can be associated with the sample. The code assigned to the procedure will be as listed in the reference document. The assignment of codes to methods will be managed by a central systems administration function.

Example: EPA351.2

Format: 10 alpha/numeric characters

**E3 Method Sample 4 Code**
The code for one of up to four sampling methods that can be associated with the sample. The code assigned to the procedure will be as listed in the reference document. The assignment of codes to methods will be managed by a central systems administration function.

Example: EPA351.2

Format: 10 alpha/numeric characters

**E3 Parameter Code**

Code assigned by Ecology's Manchester Laboratory that describes a test, measurement, or analysis performed. Some Parameter codes include a suffix that identifies the type of fractionation used to assess the sample and determine a result for that parameter. Each such suffix is preceded by a hyphen (-).

The Manchester Laboratory uses several hundred Parameter Codes. The only EIM System window in which these E3 Parameter Codes appear is the E3 Results List Box, in the far right portion. Three E3 Parameter Codes are commonly of interest to Ecology users because they can be used to decipher the type of fractionation. These are:

| | |
|---|---|
| -DIS | Dissolved |
| -HF | Total Hydrogen Fluoride |
| -TR | Total Recoverable |

The EIM System has been designed to automatically convert these three specific E3 Parameter Codes during the LOAD process to "Dissolved", "Hf Total", or "Tot Recoverable", respectively. The converted values are displayed in the text box for the attribute "Sample Fraction" in both the **Result (Sampling) Details Dialog Box** and the **Result (Sampling) Insert/Update Dialog Box**.

| | E3 Parameter Code | Description |
|---|---|---|
| Examples: | AU | Gold |
| | AU-DIS | Gold, Dissolved |
| | AS-HF | Arsenic, Total Hydrogen Fluoride |
| | AG-TR | Silver, Total Recoverable |

Format: 10 alpha/numeric characters

**E3 Project Identification Code**

EIM Required Field

The code assigned to the sample by the responsible project lead or the laboratory performing the analysis to uniquely identify the project.

Examples: EILS567 SED8809

Format: 8 alpha/numeric characters

**E3 Project Station Name**
Required Field

The project-specific name defined by the Project Lead for a given station during the course of a specific project . It *may* be the same as the Station Identification Code. A Station that is associated with multiple projects may have multiple Project Station Names.

A Project Station Name must be *unique within a specific project;* but, a Project Station Name does *not* need to be unique *across* projects.

Example: MW1
(Station ABC will be referred to as MW1 during the current project.)

Format: 40 alpha/numeric characters

**E3 Rejected Result Indicator**
Indicates whether a user has rejected a particular result (Sample or Measurement) for a specific Project. In order to complete the rejection of a result, the user also must enter a reason for the rejection in either of two attribute text fields, E3 Result Validation Method Description or E3 Result Value Description (Comment) .

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES, Rejected); lack of a = "N" (=NO, not Rejected).

**E3 Result Analysis Date**
EIM Required Field

The date that the E3 result was analyzed by the laboratory. This can be important where the delay between sampling and analysis might affect the measured result.

Example: 11-17-1997

Format: MM-DD-YYYY
You must enter the hyphens.

**E3 Result Analysis Time**
EIM Required Field

The time that the E3 result was analyzed by the laboratory . This can be important where the delay between sampling and analysis might affect the measured result.

Example: 04:24:16 16:03:00

Format: HH:MI:SS (hours, minutes, seconds) in military time
NOTE 1: You must enter the colons.
NOTE 2: If you enter only HH:MI, the system completes the entry with ":00".

**E3 Result Analytical Method**
EIM Required Field

The code assigned to the analytical procedure(s) (Method Description), as listed in the reference document, used to derive the result. The assignment of a code to a Method Description will be managed by a central systems administration function.

Select from a list of permitted values.

Example: EPA330.2 – the E3 Method Code assigned to the Method Description "Chloride, Sulfate determination"

Format: 10 alpha/numeric characters

**E3 Result Comment**
Brief textual comments about the E3 result.

Format: 254 alpha/numeric characters

**E3 Result Confidence Level Percent Measure**
The confidence interval associated with numeric E3 Result Reported Value, if appropriate

EIM Permitted Values:
90 95 99 99.9

Format: 4 alpha/numeric characters

**E3 Result Data Qualifier Code**

EIM Required Field

A code associated with numeric E3 Result Reported Value data reported by laboratories . The value is used for quality assurance/quality control purposes. While not all data are qualified, appropriate data qualifiers must be entered for any results qualified by the lab doing the analysis.

| | | |
|---|---|---|
| Example: | E | Reported result is an estimate. |
| | G | Value is greater than result reported. |
| | J | The analyte was positively identified.<br>The associated numerical result is an estimate. |
| | N | For organic analytes, there is evidence<br>The analyte is present in this sample. |
| | NAF | Not analyzed for. |
| | NC | Not calculated. |
| | NJ | There is evidence that the analyte is<br>Present. The associated numerical result is an estimate. |
| | QNS | Quantity not sufficient. |
| | REJ | Data are unusable for all purposes. |
| | U | The analyte was not detected at or above<br>the reported result. |
| | UJ | The analyte was not detected at or above<br>the reported estimated result. |
| | U? | Translation of a data qualifier that does<br>not exist in EIM, but which may be reasonably interpreted as "*the analyte was not detected at or above the reported result*." The original definition may have varied; but the intent was the denote the result as not detected. |
| | J? | Translation of a data qualifier that does<br>not exist in EIM, but which may be reasonably interpreted as "*the analyte was positively identified. Consider the associated numerical an estimate*." The original definition may have varied, but the intent was to treat the positively identified result as an estimate. |
| | U? | Translation of a data qualifier that does<br>not exist in EIM, but which may be reasonably interpreted as "*the analyte was not detected at or above the reported estimated result*." The original definition may have varied; but the intent was to denote the result as not detected at the estimated level reported. |
| Format: | | 3 alpha/numeric characters |

**E3 Result Instrument Value**
The actual measured value for a test *as recorded by the equipment*.

This value may be different from the analysis result, the E3 Result Reported Value, where other circumstances, such as machine calibration, etc., may affect the ability of the equipment to detect an analyte. In such cases, the analyst will record a reported value at a predetermined detection limit as the E3 Result Reported Value and the actual machine-determined value as the E3 Result Instrument Value.

Example: 0.43

Format: 8 numeric characters and 7 decimal places

**E3 Result Reported Value**
Required Field

The actual reported value with the reported decimal places. This may be a method limit or the instrument reading. When used, this value *must* be used in conjunction with the characteristic and units of measure, UOM E3 Result Short Form Name.

Examples: 1.50 0.330

Format: 10 alpha/numeric characters

**E3 Result Sample Fraction**
The type of fractionation used to assess the sample and determine a result for a characteristic. Fractionation is the separation (of a chemical compound) into components, as by distillation or crystallization.

EIM Permitted Values:
Suspended
Total
Dissolved
Tot[al] Recoverable
HF Total

Format: 15 alpha/numeric characters

**E3 Result "Stored As" Value**
The numeric representation of the result of the E3 Result Reported Value.

Example: 0.3000000

Format: 8 numeric characters and 7 decimal places

**E3 Result Unidentified Species Code**
A "placeholder" taxonomic identification for the sample. Used with a valid genus name to indicate that a unique species has been observed but not taxonomically identified.

EIM Permitted Values:

SP.1, SP.2, SP.3, SP.4, SP.5, SP.6, SP.7, SP.8, SP.9, SPP.

Format: 10 alpha/numeric characters

**E3 Result Validation Method Description**
A brief description of the validation method that was used for the sample result.

Example: Lab-generated duplicates

Format: 254 alpha/numeric characters

**Result Value Description (Comment)**
A textual description of the result.

Example: Cloud cover is approximately 20%.

Format: 254 alpha/numeric characters

**E3 Sample Chain of Custody Flag**
Indicates whether or not a chain of custody is required for the sample. Chain of custody information is typically required where the results from the sample are to be used for enforcement action purposes. Such samples will be subject to more rigorous control and management procedures than might normally be applied.

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES, required); lack of a = "N" (=NO, not required).

**E3 Sample Chemical Preservation Method**
The name of the chemical or physical preservation method used to preserve the E3 Sample.

Example: Refrigeration

Format: 15 alpha/numeric characters

**E3 Sample Composite Flag**
Indicates whether the sample represents a combination or composite of other samples.

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES); lack of a = "N" (=NO).

**E3 Sample Identification Number**
EIM Required Field

A code to identify a sample that is assigned by the project scientist. This number may be a randomly selected number by the sampler or it may be a pre-assigned number designated by the laboratory.

Example: AIR9098

Format: 12 alpha/numeric characters

**E3 Sample Matrix**
Required Field

Describes the form of the sample.

Select from list of permitted values.

Examples: Air/Gas
Tissue
Water
Other Liquid

Format: 14 alpha/numeric characters

**E3 Sample Refrigerated Temperature Quantity**
The temperature at which the sample was refrigerated.

This field must be used in conjunction with a unit of measure, E3 UOM Sample Short Form Name.

Examples: 0 18

Format: 3 numeric characters

**E3 Sample Replicate Flag**
Indicates whether a replicate sample (a sample of the same type and medium taken at the same time and place, using the same method) exists. Replicate samples may have the same E3 Sample Identification Number in certain instances.

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES); lack of a = "N" (=NO).

**E3 Sample Source**
Required Field

Indicates the environmental resource from which the sample was taken and which might be most directly characterized by the results from the sample.

Example: Groundwater

Format: 20 alpha/numeric characters

**E3 Sample Type Code**
Code that identifies the type of sample and is assigned by the laboratory. Sample types include but are not limited to a lab duplicate (i.e. a duplicate sample that was created in the lab), spike, etc.

NOTE: This attribute appears only in Transition (E3 Result) windows and dialog boxes, not in Sampling Result windows and dialog boxes.

| | Code | Explanation |
|---|---|---|
| Examples: | LDP2 | Lab duplicate #2 |
| | LMX1 | Lab matrix spike #1 |

Format: 5 alpha/numeric characters

**E3 Sequence Number**
The system-generated sequence number that the Interface System assigns to each result record it attempts to load to the EIM System. If a result record fails the load process, the E3 Sequence Number applies to each of the errors associated with that record in the Review Data Load Errors List Box.

Example: 6395

Format: 7 numeric characters

**E3 Station Identification Code**
EIM Required Field

The identification code (combination of text and/or numbers) used by the responsible person, typically the Project Lead, to *uniquely* identify the Station . The Station Identification Code may be overridden during the course of a Project by a project-specific name that will not affect its universal code.

Examples: EILS567 SED8809 12A070 12101100

Format: 8 alpha/numeric characters

**E3 Taxon Result ITIS Code**
For the identified Taxon for a Result, the unique International Taxonomic Information System code assigned to the taxon by the central authority.

This field is not strictly the Integrated Taxon Identification System Code. It may be one of two codes. If you are entering data about a freshwater organism, use the IT IS Code which is a 6-character code. If you are entering data about a marine organism, use the National Ocean Data Center (NODC) code which is generally a 4-character code.

Example: 114082 (ITIS Code for GENUS Acneus)

Format: 10 numeric characters; 0 decimal places

**E3 Taxon Result Name**
The full Latin name given to the taxonomic level of the subject Taxon for a Result.

Examples: Arthropoda Homo Sapiens

Format: 30 alpha/numeric characters

**E3 Taxon Sample ITIS Code**
For the subject Taxon for a Sample, the unique International Taxonomic Information System code assigned to the taxon by the central authority.

This field is not strictly the Integrated Taxon Identification System Code. It may be one of two codes. If you are entering data about a freshwater organism, use the IT IS Code which is a 6-character code. If you are entering data about a marine organism, use the National Ocean Data Center (NODC) code which is generally a 4-character code.

Example: 114082 (ITIS Code for GENUS Acneus)

Format: 10 numeric characters; 0 decimal places

**E3 Taxon Sample Name**
The full Latin name given to the taxonomic level of the subject Taxon for a Sample .

Examples: Arthropoda Homo Sapiens

Format: 30 alpha/numeric characters

**E3 Tissue Sample Type Description**
Brief description of the tissue type.

Example: Nervous tissue – that tissue making up the central and autonomic nervous system of the organism including brain tissue, brain stem, major ganglia and major nerves.

Format: 40 alpha/numeric characters

**E3 UOM Field Activity Short Form Name**
The abbreviation for the name of the unit of measure (UOM ) associated with the field activity of depth measurement, E3 Field Activity Upper Depth Quantity or E3 Field Activity Lower Depth Quantity

| | | |
|---|---|---|
| Examples: | cm | centimeters |
| | km | kilometers |
| | Nmi | Nautical miles |

Format: 10 alpha/numeric characters

**E3 UOM Result Short Form Name**
The abbreviation for the name of the unit of measure (UOM ) associated with the characteristic result measurement, E3 Result Value Measure.

| | | |
|---|---|---|
| Examples: | #/cm3 | Number per cubic centimeter |
| | gal/min | Gallons per minute |
| | mL/L | Milliliters per liter |
| | ppm | Parts per million |

Format: 10 alpha/numeric characters

**E3 UOM Sample Short Form Name**
The abbreviation for the name of the unit of measure (UOM ) associated with the sample refrigeration temperature measurement, E3 Sample Refrigerated Temperature Quantity.

EIM Permitted Values:

| | |
|---|---|
| deg C | Degrees Centigrade |
| deg F | Degrees Fahrenheit |
| deg K | Degrees Kelvin |

Format: 10 alpha/numeric characters

**Ecology Interaction Description**
A description (or text name) of an Ecology interaction. for a facility/site.

An Ecology Interaction Description is associated with an alpha code named Ecology Interaction Type.

| | Ecology Interaction Type | Ecology Interaction Description |
|---|---|---|
| Examples: | AOPERMIT | Air Operating Permit |
| | HWG | Hazardous Waste Generator |
| | SCS | State Cleanup Site |
| | SWD | State Water Discharge |

**Ecology Interaction Type**
An alpha code (acronym) associated with an Ecology Interaction Description that identifies an Ecology interaction for a facility/site.

| | Ecology Interaction Type | Ecology Interaction Description |
|---|---|---|
| Examples: | AOPERMIT | Air Operating Permit |
| | HWG | Hazardous Waste Generator |
| | SCS | State Cleanup Site |

**Ecology Person**

An Ecology employee. Initially, this entity type is likely to contain information about only those employees who play the lead role on a monitoring project. In the long term, however, this entity may be merged with the employee table of the (Employee Plus Information Computer (EPIC) System once that system is developed.

*See also*

Project Lead

**Ecology Person Email Address**

The complete Email address for an Ecology Person.

Example: user461@ecy.wa.gov

Format: 20 alpha/numeric characters

**Ecology Person FAX Number**

The default facsimile number at which an Ecology Person may be reached.

Example: (360)407-5678

Format: Up to 15 alpha/numeric characters

**Ecology Person First Name**

Required Field

The first name of the Ecology Person.

Example: John

Format: 20 alpha/numeric characters

*See also*

Project Lead

Project Lead First Name

**Ecology Person Honorific Name**
The honorific title typically used by an Ecology Person.

Permitted Values:
Mrs.
Ms.
Dr.
Miss
Mr.

Format: 4 alpha/numeric characters

**Ecology Person Last Name**
Required Field

The last name of the Ecology Person.

Example: Tooley

Format: 20 alpha/numeric characters

*See also*
Project Lead
Project Lead Last Name

**Ecology Person Middle Initial**
The middle name of the Ecology Person.

Example: E

Format: 1 alpha/numeric characters

**Ecology Person Phone Extension Number**
The extension for an Ecology Person's phone number.

Example: 1 123456

Format Up to 6 alpha/numeric characters

**Ecology Person Phone Number**
The phone number for an Ecology Person

Example: (360)407-1234

Format Up to 15 alpha/numeric characters

NOTE: although there is no format requirement, the preferred format is (xxx)yyy-zzzz.

**EIM Interface System**
A system designed to accept data for the purpose of migrating that data to the EIM System.

During a Load process, the EIM Interface System (also referred to as the Interface System) compares each record with the EIM System's minimum acceptance standards. As a result of that comparison, the Interface System either loads or rejects the record and assigns it a Load Status of either "Loaded" or "Rejected".

NOTE: As a part of the minimum acceptance standards, each Result record must have been assigned a Project and a Station.

**EIM Query/Report System**
The EIM Query/Report System was developed in Microsoft Access. As a result it has a different format from the EIM System and some additional functionality.

The EIM Query/Report System allows the user to select EIM System or EIM Interface System attributes related to Project, Station, Characteristic, Activity/Results, and Location that will be used as search criteria.

The user may select a type of standard report or he or she may customize a report by selecting specific attributes to be included. The user may view or print the report; or the user may export the data to a spreadsheet (Excel or Access) for use in that format.

Each dialog box and screen of the EIM Query/Report System is displayed on the EIM Query/Report System window that provides some functionality that does not exist in other parts of the EIM System. When you click on "File" in the upper left corner, a dropdown menu appears. Click on "Print" to print a copy of the dialog box, screen, report, etc. that is displayed in the box below. You also may select to use MS Word and Notepad.

When you display a report format, click on the View button in the upper left corner to activate the dropdown menu that contains the items "Zoom" and "Pages". Click on "Zoom" to increase or decrease the size of the displayed report. Click on "Pages" to choose how many pages to display at one time.

*See also*
**EIMQuery/Report : Form**

**EIM System**

The Environmental Information Management (EIM) System was built to fill a growing need on the part of different agency programs to access information from the rest of the department, as well as to assist in the sharing of data between Ecology and external users. Prior to the development of EIM, each agency program stored the information that it gathered independently, and it was often very difficult for them or other programs to use it. EIM was designed to contain the most important ambient environmental monitoring and natural resource information from every program in a format that all programs could access. The information that is in EIM is intended to help users form a picture of the state of the environment in a particular area. To do so, it captures information on different projects, stations, field activities, and results. Together, records of different projects and stations and the results of observations, measurements, and samples that are conducted there help fill in the specifics of the condition of the environment.

A large group of people from different programs at the Department of Ecology worked to determine exactly what information EIM would store, how it would store it, and what it could do with the information it contains. EIM can store a wide variety of data and then pull different

Data sets together to generate reports on data from a project or monitoring station, or about a specific chemical or geographic area. For example, EIM can tell you what projects have been undertaken to characterize the water quality of a watershed, such as the Cedar River/Lake Washington system; what water quality monitoring stations Ecology operates in that watershed; and what trends exist in pollutants monitored, such as total suspended solids or nitrogen. Reports can show change over time, or how a change affects different places in different ways, which helps Ecology track the changing condition of the environment.

EIM also makes all of this environmental information available to the public. Using the Internet, individuals or groups can look at data that has been collected on a particular topic in which they are interested. EIM makes environmental data more useful and accessible for people who work at the Department of Ecology, outside researchers, and anyone else who would like to use the system.

*See also*
EIM System Components

**EIM System Component**

The EIM System includes the following six major components, each of which is accessible directly from the EIM System Menu .

Projects
Stations
Activities/Results
Reference Tables
Interface System
Reporting System

**Elevation**
The number of meters or feet above or below mean sea level at the Station latitude/longitude. This value is negative below the mean sea level.

NOTE: In the Interface System, the Update and Detail dialog boxes show units only only in feet. If the units of your records are in meters, be sure to follow up after the records are loaded into the EIM System to change the units to meters.

Units are expressed using Elevation Unit Code .

Value range: 0000000.000 to 9999999.999 above sea level
0000000.000 to –999999.999 below sea level

Examples: 25.3 -7.2

Format: 7 numeric characters (including a minus sign if appropriate) and 3 decimal places

**Elevation Unit Code**
Units in which the Elevation is measured.

NOTE: In the Interface System, the Update and Detail dialog boxes show units only only in feet. If the units of your records are in meters, be sure to follow up after the records are loaded into the EIM System to change the units to meters.

Values: FT = Feet
M = Meters (default value)

Format: 2 alpha/numeric characters

**Eligible to be Loaded**
Displays the number of interface records (E2 Station or E3 Results) eligible to be loaded from the Interface System to the EIM System.

**EPA Identifier**
A unique identifier which the US Environmental Protection Agency (EPA) assigns to a facility/site. Once assigned, the identifier is active until formally withdrawn by the EPA , the state, or by the owner. Not every facility/site has an EPA Identifier. The EPA Identifier may be the same as the Federal Program ID.

**Error Message**
A system-generated textual description of the error encountered for a result record that failed the load process from the Interface System to the EIM System.

Examples: RESULT – Sample not found
FIELD ACT – unable to find geo location for Station
RESULT – Unit of measure not found

Format: 80 alpha/numeric characters

**Facility/Site**
An operation at a fixed location that is of interest to Ecology because it has an active or potential impact upon the environment.

Examples: Operation that pollutes the air or water
Hazardous waste management facility
Licensed laboratory
Farm which draws water from a well
Spill cleanup site
Hazardous waste generator
Solid waste recycling center

Facility/site also is one of six facility/site components within the Facility/Site Identification System. The facility/site component includes attributes which identify each facility/site by its unique identifier and name, its physical address, geographic location, and miscellaneous location data.

**Facility/Site Components**
Each facility/site has six components in the Facility/Site Identification System which identify and describe it and the relationship Ecology has with it.

Facility/Site
Affiliations
Interactions
SIC
Associations
Feature

**Facility/Site Identification System**
The Facility/Site Identification System provides a central repository of key information for each facility/site. It includes six facility/site components.

Facility/Site
Affiliations
Interactions
SIC
Associations
Feature

**Facilty/Site Identifier**
A unique identification number assigned to a facility/site.

If a facility/site was migrated to the Facility/Site Identification System from an Ecology current system, the identifier from the current system may be retained as the Facility/Site Identifier.

When a new facility/site is added to the Facility/Site Identification System, the Facility/Site identifier is *randomly generated by the system.*

Examples: 725 1059 31084 34527421

Format: Up to 8 numeric characters

**Facility/Site Name**
The unique facility/site name. This may be the name by which the facility/site is commonly known (e.g. BP Gas Station) or the name of the site (e.g. Nr 4 Stack). It may include a city name to distinguish it from other similar names.

Examples: Alaska Copper & Brass
Black Nugget Mine – NE/Creek
Black Nugget Mine – SW/Creek
Boeing Everett
Boeing Plant 2
BP Station #11032
Bunker Creek Milepost 7.7

Format: 40 alpha/numeric characters

**Federal Program ID**
An identification number from any one of a number of federal information systems that applies to an Ecology interaction. It *may* be the same as the EPA Identifier.

Example: WAD092899574

Format: 15 alpha/numeric characters

**Field Activity**
Field activities are performed during a project to evaluate conditions in the environment. A field activity may consist of the collection of a sample, a measurement , or an observation . The results of these activities may be recorded in the field or through lab analysis of a collected sample.

**Field Activity Comment**
Any comments or descriptive information about the field activity that took place.

Example: Visibility was poor due to heavy rain.

Format: 254 alpha/numeric characters

**Field Activity End Date**
The date that the field activity was completed.

Example: 11-17-1997

Format: MM-DD-YYYY

NOTE: You *must* enter the hyphens; otherwise an error message will appear.

**Field Activity End Time**
The time that the field activity was completed.

Example: 04:24:16 16:03:00

Format: HH:MI:SS (hours, minutes, seconds) in military time
NOTE 1: You must enter the colons.
NOTE 2: If you enter only HH:MI, the system completes the entry with ":00".

**Field Activity Grouping**
Established so that field activities can be linked to each other as siblings rather than in a parent child relationship. Activities may be grouped together for various reasons appropriate to the purpose of the monitoring taking place.

Example: Group of samples taken at the same time and place but not composited.

**Field Activity Grouping Reason Description**
Descriptive information about the reason the associated field activities were grouped.

The system default description message reads: "Activities took place on the same date and at the same time".

Format: 60 alpha/numeric characters

**Field Activity Lower Depth Quantity**
A measure associated with an activity that is normally conducted over or within a vertical depth range within the column. It measures the distance from the surface to the *lower* boundary of the zone within which the activity is conducted or over which the activity is integrated.

This measure must be used in conjunction with a unit of measure, UOM Field Activity Short Form Name.

Example: 10.00 (This would be the correct value to record if you were taking measurements in a section of the water column that started at 5 feet below the surface and ended 10 feet below the surface.

Format: 5 numeric characters and 2 decimal places

**Field Activity Reference Point**
The reference point from which the depth that the field activity took place was measured.

Example: Stream Surface

Format: 30 alpha/numeric characters

**Field Activity Start Date**
EIM Required Field

The date that the field activity was begun.

Example: 11-17-1997

Format: MM-DD-YYYY

NOTE: You must enter the hyphens.

**Field Activity Start Time**
The time that the field activity was begun.

Examples: 04:24:16 16:03:00

Format: HH:MI:SS (hours, minutes, seconds) in military time
NOTE 1: You must enter the colons.
NOTE 2: If you enter only HH:MI, the system completes the entry with ":00".

**Field Activity Type**
EIM Required Field

The type of field activity being performed.

Values: Sample
Measurement
Observation

Format: 11 alpha characters

**Field Activity Upper Depth Quantity**
A measure associated with an activity that is normally conducted over or within a vertical depth range within the column. It measures the distance from the surface to the *upper* boundary of the zone within which the activity is conducted or over which the activity is integrated.

This measure must be used in conjunction with a unit of measure , UOM Field Activity Short Form Name.

Example:

5.00 (This would be the correct value to record if you were taking measurements in a section of the water column that started at 5 feet below the surface and ended 10 feet below the surface.)

Format: 5 numeric characters and 2 decimal places

**Fill**
The material placed in the area between a casing and a borehole in order to prevent fluid migration between permeable zones and to support the casing.

**Fill Material Type Code**
Required Field

Identifies the type of material used as fill for a well interval .

Examples: Bentonite
Clay
Cement Grout

Format: 4 alpha/numeric characters

NOTE: System converts each item from list of permitted values to a four-character code (e.g. BNTN = Bentonite; CMNT = Cement Grout)

**Fill Thickness**
The thickness of the fill material in an annular space, such as between the perforated casing and screened piezometer, or a surface seal, or gravel pack around a well screen.

Units are expressed using the Fill Thickness Unit Code.

Example: 3.5

Format: 3 numeric characters and 3 decimal places

**Fill Thickness Unit Code**
Units in which the Fill Thickness is expressed

Values: CM = Centimeters
IN = Inches

Format: 2 alpha/numeric characters

**Fill Volume**
The volume of the fill for a well interval. This is the thickness times the fill height.

Units are expressed using the Fill Volume Unit Code .

Example: 4.5

Format: 4 numeric characters and 3 decimal places

**Fill Volume Unit Code**
Units in which the Fill Volume is expressed.

Values: Cubic Feet
Cubic Meters
Cubic Yards

Format: 12 alpha/numeric characters

**Geographic Area**
A geographic structure or feature typically defined using GIS tools. Geographic areas are used to define Project study areas.

**Geographic Area Name**
Required Field

The common name assigned to the Geographic Area of interest.

Example: Nooksack Water Resources Inventory Area

Format: 30 alpha/numeric characters

**Geographic Area Type**
Required Field

A code describing the geospatial feature type of the Geographic Area of interest.

Permitted Values:
County
User Defined
HUC
WRIA
Other

Format: 12 alpha/numeric characters

**Geographic Area GIS Feature ID**
An identifier used to reference the object in the GIS environment. This will typically be the feature id in the relevant GIS coverage.

Example: 1001

Format: 10 numeric characters; 0 decimal places

**Geographic Area GIS Theme Name**
An identifier used to reference the object in the GIS environment. The will typically be the name of the relevant GIS coverage or theme.

Examples: County
WRIA

Format: 80 alpha/numeric characters

**Geographic Position**
Required Field

A general description of the geographic location of the Station being mapped in relationship to the ground.

Choose "Geographic Position", which consists of a code and a text description, from the drop-down list box in the Combined Code Table named **Geographic Position**.

The default Geographic Position is 24 = Monitoring Station.

Code Range: 01 – 24, plus 99 = “Unknown”

Example: 01 NE Corner of Land Parcel
99 Unknown

Format: 2-digit code and a text name

NOTE: If you change the Geographic Position when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**GIS**
An acronym for Geographic Information System.

**GIS Verified Flag**
A flag (or code) generated by the program commonly known as “Skipper ”. A “ ” in the box at the left of the words “GIS-verified” indicates that “Skipper” was able to verify the geographic coordinate entries for the Station.
Click on the text box to place a in the box or to remove an existing .

Format: in box = “Y” (= YES, verified); lack of a = “N” (=NO, not verified).

**Horizontal Accuracy Level**
Required Field

The code for the range within which the measured value of the horizontal coordinate for the Station may vary from the actual value.

Choose "Horizontal Accuracy Level" from the dropdown list box in the Combined Code Table named **Horizontal Accuracy Level**.

Code range: 01 – 13, plus 99 = "Unknown"

Examples: 01 = > 1/100 Meter
06 = +/- 40 feet (12 meter)
13 = Greater than 2000 feet

Format: 2 numeric characters

NOTE: If you change any entry in the "Location" section of the Stations Window (except for Description) when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Horizontal Collection Method**
Required field

The technique used to collect the coordinates of a Station.

Choose "Horizontal Collection Method" from the dropdown list box in the Combined Code Table named **Horizontal Collection Method**.

Code range: 01-28, plus 99 = "Unknown"
Examples: 01 Address Matching -- Block Face
14 Digitized -- paper map
28 Zip Code Centroid

Format: 2 numeric characters

NOTE: If you change the Horizontal Collection Method when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Horizontal Collection Source**
Required Field

The scale of the base map source of information used to determine the latitude and longitude of the Station. Density of natural features displayed on the base map will vary by base map scale.

Choose "Collection Source" from a drop-down list box in the Combined Code Table named

**Horizontal Collection Source**.

Range: 1 - 23, plus 99 = unknown

Examples: 1 = Not applicable
2 = 1:500,000
10 = 1:24,000
23 < 1:500

Format: 2 numeric characters

**Horizontal Collection Source -- continued**

NOTE: If you change the Horizontal Collection Source when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Horizontal Datum**
Required field

The shape or spheroid to which the surface of the earth has been orthographically transferred to depict the latitude/longitude.

This field identifies whether the NAD27 or NAD83 is the reference for the horizontal coordinate of the Station.

Choose "Horizontal Datum" from the dropdown list box in the Combined Code Table named **Horizontal Datum**.

Code range: 01 - 04, plus 99 = "Unknown"

Examples: 01 North American Datum 1927 (NAD27)
02 North American Datum 1983 ('91 Adj.) (NAD83)

Format: 2 numeric characters

If using GPS with the horizontal datum set to WGS (World Geodetic System), choose value 04 = WGS84 (GPS NAVD88).

If using USGS Quad 7.5' or 15' quads or NOAA (National Oceanographic & Atmospheric Administration) charts, choose value 01 = NAD27.

NOTE: If you change the Horizontal Datum when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Interaction**

One of six facility/site components. An interaction identifies a reason Ecology has an interest in a facility/site. Each reason is related to an active or potential threat by the facility/site to the environment. An interaction includes attributes that identify each interaction by its type (e.g. Air Operating Permit, Hazardous Waste Generator), other Ecology systems that contain data about it and the facility/site. It also includes attributes that provide its effective and end dates and an active or inactive status indicator.

Each interaction has both an Ecology Interaction Type (code) and an Ecology Interaction Description.

| | Ecology Interaction Type | Ecology Interaction Description |
|---|---|---|
| Examples: | AOPERMIT | Air Operating Permit |
| | HWG | Hazardous Waste Generator |
| | SCS | State Cleanup Site |
| | SWD | State Water Discharge |

**Interaction End Date**

The date that the Interaction Status changes for the interaction between Ecology and the facility/site..

Example: 04-18-1997

Format: MM-DD-YYYY

**Interaction Start Date**

The date, if known, that the interaction between Ecology and the facility/site was (1) established or (2) originally entered.

NOTE: Assign the date of 07-04-1776 if the Interaction Start Date is unknown.

Examples: 07-04-1776 (unknown start date)
04-18-1997

Format: MM-DD-YYYY

**Interaction Status**
A status code that identifies whether the interaction Ecology has with a facility/site is active or inactive.

Values: A = Active (default value)
I = Inactive

Format: System converts selection of an option
Button to 1 alpha character

**Interface Batch Number**
Required Field

**The number assigned to a group of result records entered or submitted for entry into the Interface System. Generally, the organization or group submitting the records assigns the batch number.**

The Interface Batch Number, together with the Interface System Name and the E3 Sequence Number, uniquely identifies a result record.

Example: 6395

Format: 5 alpha/numeric characters

**Interface Delete Status Options**
Includes four options for deleting E3 Result Records. Three are Interface Load Status Code Options and one is an "All" option. These are displayed in the Administration Dialog Box. By selecting one of these options, you will delete all records that match the option from the identified system and batch.

The four options include:

**Rejected**: The Result records failed to be loaded.

**Loaded:** The Result records were successfully migrated to the EIM System.

**Deferred**: The user selected to defer the loading of the Result record until a later time. Perhaps the data were incomplete or the user was not sure the data were correct.

**All**: Includes all three categories (Rejected, Loaded, and Deferred).

NOTE: *It is possible to delete every record of a batch when you select any one of the four options defined above*. When you do so, the Interface System also deletes the Project record (and the Station record if applicable).

**Interface Load Process Message**
A message that appears in the third section of the **Results Load Confirmation Dialog Box** and the **Stations Load Confirmation Dialog Box.** Prior to a load process, the message instructs you to press the load button to begin the load process. Following a load process, the message advises whether the load was successful or unsuccessful, or provides other information.

**Interface Load Status**
Indicates the state of the data load process for the E2 Station or E3 Result record.

Values:

**Rejected**: (System set) The record failed to be loaded during a load process.

**Loaded:** (System set) The record was successfully loaded (i.e. migrated to the EIM System).

**Deferred**: (User set) By clicking on the Deferred Pushbutton, the user defers the loading of the record until a later time. Perhaps the data were incomplete or the user was not sure the data were correct.

**Blank or No Status**: Applies when (1) a record has not yet been through a load process or (2) a user has clicked on the Reset Pushbutton to change the record's load status from "Deferred" or "Rejected" record in order to put it through another load process.

Format: 12 alpha/numeric characters

**Interface Percent Progress Message**
A message that appears in the fourth section of the **Results Load Confirmation Dialog Box** and the **Stations Load Confirmation Dialog Box.** During a load process, the message displays the percent of progress.

**Interface Search Record Count**
The number of interface records (E2 Station or E3 Result Records) the system finds and displays after conducting a search based on the criteria you entered.

**Interface System Name**
Required Field for Interface System

The short name of the system for which result records have been entered into the Interface System in order to be loaded to the EIM System.

Examples: LIMS PSAMP

Format: 5 alpha/numeric characters

**Laboratory**
A recognized facility which performs various analysis procedures on field samples for various characteristics giving results.

*See also*
E3 Lab Sample Name
Laboratory Name

**Laboratory Name**
Required Field

The formal name by which a laboratory facility is commonly known.

Example: Manchester Laboratory

Format: 60 alpha/numeric characters

*See also*
Lab Result Name
Lab Sample Name

**Lab Phone Number**
The telephone number of associated with the Laboratory Name.

Example: 360-871-8860 (phone number for Ecology's Manchester Laboratory)

Format: 15 alpha/numeric characters

**Lab Result Name**
The Laboratory Name by which the laboratory which actually processed the samples is commonly known. This is not necessarily the same laboratory to which the sample originally was sent.

Example: Manchester Laboratory

Format: 60 alpha/numeric characters

*See also*
Lab Sample Name

**Lab Sample Name**
The Laboratory Name by which the laboratory to which the sample originally was sent is commonly known. This is not necessarily the same laboratory that processed the results.

Example: Manchester Laboratory

Format: 60 alpha/numeric characters

*See also*
Lab Result Name

**Last Update Time/Date Stamp**
The date and time (military) assigned by the system when the database record (e.g. a characteristic record or an alias record) was last updated.

Example: 10-09-1997 15:10

Format: 20 alpha/numeric characters

**Last Update User ID**
The unique id assigned to the system user who last updated the record (e.g. a characteristic record or an alias record). This will usually correspond to the user's System User Id

Example: JT00461 GDES461

Format: 8 alpha/numeric characters

**Lat Degree Number**
(Latitude Degree Number)

Required if using Latitude/Longitude Coordinate Referencing System and not entering decimal value (Decimal Latitude)

The degrees measure of the latitude of the Station. The first of three quantities that comprise the full latitude coordinate of the Station.

Range: 45 - 49

Format: 2 numeric characters

NOTE: If you change the Lat Degree Number when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Lat Minute Number**
(Latitude Minute Number)

Required if using Latitude/Longitude Coordinate Referencing System and not entering decimal value (Decimal Latitude)

The minutes measure of the latitude of the Station. The second of three quantities that comprise the full latitude coordinate of the Station.

Range: 00 - 59

Format: 2 numeric characters

NOTE: If you change the Lat Minute Number when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Lat Second Number**
(Latitude Second Number)

Required if using Latitude/Longitude Coordinate Referencing System and not entering decimal value (Decimal Latitude)

The seconds measure of the latitude of the Station. The third of three quantities that comprise the full latitude coordinate of the Station.

Range: 00.00 - 59.99

Format: 2 numeric characters and 2 decimal places

NOTE: If you change the Lat Second Number when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Lat/Long**
(Latitude/Longitude)

Latitude (X coordinate) and longitude (Y coordinate) are ellipsoidal coordinate representations that show locations on the surface of the earth using the equator and the prime meridian (Greenwich, England) as the respective latitudinal and longitudinal origins.

Degrees of latitude are represented in the standard format by a two-digit decimal number ranging from 0 through 90 (the range for Washington is 45 - 49).

Degrees of longitude are represented in the standard format by a three-digit decimal number ranging from 0 through 180 (the range for Washington is 116-125).

Decimal portions of latitude and longitude also may be expressed in terms of minutes (00 - 59) and seconds (00.00 - 59.99)

*See Also*
Decimal Lat
Lat Degree Number
Lat Minute
Lat Second
Decimal Long
Long Degree Number
Long Minute
Long Second

**Legislative District Number**
No entry needed. The program "Skipper" will populate this field.

The number and associated text description of the Washington Legislative District in which the Station is located.

If you wish to enter a Legislative District Number for a Station, click on the prompt and choose the appropriate one from the drop-down list box in the Combined Code Table named **Legislative District**.

Range: 01 - 49

Example: 12 Legislative District No. 12

**LIMS**
An acronym for the Laboratory Information Management System. Ecology's Manchester Laboratory uses a custom designed LIMS for internal data tracking and processing. That system provides an electronic feed of final results to the EIM Interface System for loading into the EIM System.

**Linked Activities Indicator**
A search criteria flag (i.e. a check mark [ ] by which the user indicates that the matches returned from a search of the EIM database should include all that match the criteria the user has specified in the **EIMQuery/Report : Form Dialog Box** *and* any activities linked to any of those matches.

This indicator is active only when the Advanced Query Indicator is active (i.e. has a check mark [ ] in the box).

NOTES:

1. Activating this indicator may result in a VERY LONG processing time before the results are available to view or print. You may wish to consider this before you activate this indicator and run your query.

2. To end a query that is running longer than you wish, go to the Task Manager screen for Windows. Click on **EIM Query/Report System** in the list box; then click on the "End Task" button. This will close all your EIM System windows, but it will leave the **EIM System Menu Window** minimized in a button marked "Environmental…" on the lower bar of your screen. Click on that button to reactivate the menu.

**Location Address**

The physical address of a Station. This may not be the same as its mailing address.

Examples: E. Fifth St and Blanford Dr
3886 Flickering Star Drive
1/4 MI NE OF S FLINT RD AND W ELECTRIC

Format: Up to 40 alpha/numeric characters

**Location City**

The city in which the Station is located.

Example: Tacoma

Format: Up to 25 alpha/numeric characters

**Location Description**

Required Field

A single line of text provided to help locate the Station .

Example: 200 yards north of the cattle crossing grating

Format: 40 alpha/numeric characters

**Location State**

The state in which the Station is located.

Choose **Location State** from the drop-down list box.

Values: WA, OR, ID, or BC

Format: 2 alpha characters

**Location Zip Code**
The zip code of the physical address of the Station.

Examples: 98513
985134144
98513-4144

Format: 10 numeric characters
May be entered as NNNNN
Or NNNNNYYYY
Or NNNNN-YYYY

NOTE: If 9 numeric characters are to be entered, a hyphen may be inserted between the first 5 and the last 4. If not entered, the system will insert the hyphen.

**Long Degree Number**
(Longitude Degree Number)

Required if using Latitude/Longitude Coordinate Referencing System and not entering decimal value (Decimal Longitude)

The degrees of measure of the longitude of the Station. The first of three quantities that comprise the full longitude coordinate of the Station.

Range: 116 - 125

Format: 3 numeric characters

NOTE: If you change the Long Degree Number when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Long Minute Number**
(Longitude Minute Number)

Required if using Latitude/Longitude Coordinate Referencing System and not entering decimal value (Decimal Longitude)

The minutes measure of the longitude of the Station.. The second of three quantities that comprise the full longitude coordinate of the Station .

Range: 00 - 59

Format: 2 numeric characters

NOTE: If you change the Long Minute Number when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Long Second Number**
(Longitude Second Number)

Required if using Latitude/Longitude Coordinate Referencing System and not entering decimal value (Decimal Longitude)

The seconds measure of the longitude of the Station. The second of three quantities that comprise the full longitude coordinate of the Station.

Range: 00.00 - 59.99

Format: 2 numeric characters and 2 decimal places

NOTE: If you change the Long Second Number when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Measurement**
A measurement involves something measured in its environmental setting usually using some type of instrument. A measurement result has a numerical value.

Measurement is one of three types of Field Activity. The other two types are Observation and Sampling.

**Method**
Methods used (a) in the field to take samples , measurements , or observations , and (b) in the lab to analyze samples. Each method is categorized into one of several method types: analysis, collection, preservation, and preparation. A single analytical method must be defined for an results derived from sampling or measurement field activities. Additionally, one or more methods also may be defined for a given sample, if desired.

**Method Category**
Required Field

The category of the method being used. The ANALYSIS category (used in the field or the lab) will be mandatory for a result. COLLECTION, MEASUREMENT, PROCESS, and PRESERVATION categories will be used to define the method for the sample.

Permitted Values:
- Analysis
- Collection
- Measurement
- Preparation
- Preservation

Format: 12 alpha/numeric characters

**Method Code**

Required Field only at the Result level – If Field Activity Type is "Measurement" or "Sample", not if "Observation"

The code assigned to the analytical procedure(s) (Method Description), as listed in the reference document, used to derive the result. The assignment of a code to a Method Description will be managed by a central systems administration function.

Select from a list of permitted values.

Example: EPA330.2 – the Method Code assigned to the Method Description "Chloride, Sulfate determination"

BART – The Method Code assigned the Method Description "Biological Activity Reaction Tests"

Format: 10 alpha/numeric characters

**Method Description**

The descriptive name of the analytical procedure(s), as listed in the reference document, used to derive the result. Each Method Description is assigned a Method Code by a central systems administration function.

Example: Chloride, Sulfate determination – the Method Description to which the Method Code EPA330.2 has been assigned

**Method Source**

Lists the source from which the field or lab method is derived.

Example: EPA

Format: 10 alpha/numeric characters

**MS Access Path**

The DOS path to the Microsoft (MS) Access executable named MSACCESS.EXE on a user's PC. Access to this file is needed to provide the user access to the Reporting System component of the EIM System which is written in MS Access.

If your PC has MS Access 97, the EIM System will locate the ms.access.exe file automatically. The MS Access Path text box in the Change Defaults Dialog Box will be grayed out and inactive.

If, however, you do not have MS Access 97, click on the Path Specified box to place a check mark ( ) in the box to activate the text box. Then, enter the full DOS path to your

ms.access.exe file in the text box. If you are unable to determine the DOS path, contact your local Computer Support staff person.

**Observation**
An observation involves something observed in its environmental setting usually without using any type of instrument. An observation result does not have a numerical value; it generally has a text description.

Observation is one of three types of Field Activity. The other two types are Measurement and Sampling.

**Opening**
A perforation in the casing or the borehole which allows water in the surrounding strata to enter the well . When the opening is in the casing, it may be screened or unscreened. Screened openings may have a mesh size and material.

**Opening Description**
Additional text that provides further description of the Opening.

Example: The wire wound screen was telescoped into the casing with an inflatable packer.

Format: 120 alpha/numeric characters (Case sensitive)

**Opening Length**
The measure of the length of an opening for a Well Interval.

Units are expressed using Opening Length Unit Code.

Example: 5.25

Format: 2 numeric characters and 3 decimal

**Opening Length Unit Code**
Units in which the Opening Length is expressed.

Values: IN = Inches
CM = Centimeters

Format: 2 alpha/numeric characters

**Opening Material Type Code**
Identifies the type of material of which the Well Interval screen protection is constructed.

Select from list of permitted values.

Examples: Brass
Galvanized Iron
Plastic, PVC (non-glued)

Format: 2 alpha/numeric characters

NOTE: System converts each permitted value to a two-character code (e.g. BR = Brass; PN = Plastic PVC (non-glued)

**Opening Mesh Size**
The measure of the size of the mesh in the screened Opening of a Well Interval.

Units are expressed using the Opening Mesh Size Unit Code.

Examples: 8.333
25

Format: 2 numeric characters and 3 decimal places

**Opening Mesh Size Unit Code**
Units in which the Opening Mesh Size is expressed.

Values: CM = Centimeters
IN = Inches
NU= No Units (e.g. applies to 25 mesh)

Format: 2 alpha characters

**Opening Type Code**
Required Field

Identifies the type of Openings of the Well Interval. Openings are permeable portions of the well Casing or lining.

Select from list of permitted values.

Examples: Fractured Rock
Louvered Screen
Mesh Screen

Format: 4 alpha/numeric characters

**Opening Width**
The width of an Opening for a Well Interval. Enter the short dimension of perforations or slots openings.

NOTE: Width of wire wrap screens should be given as the screen Opening Mesh Size.

Example: .015

Format: 4 numeric characters and 3 decimal places

**Opening Width Unit Code**
Units of measure in which Opening Width is expressed.

Values: IN = Inches
CM = Centimeters

Format: 2 alpha/numeric characters

**Parent Taxon ITIS Code**
The Taxon ITIS Code of the parent of the named Taxon.

Example: 114069
(Taxon ITIS Code for Family Psephenidae) is the Parent Taxon ITIS Code for GENUS Acneus (114082).

Format: Up to 10 numeric characters; 0 decimal places

**Password**
The *current* password of the system user. Initially, the EIM System's security system, known as SARGE, assigns a password to a new user. Subsequently, the user may change the password at will using the process described in the **Change Password Dialog Box**. Access this dialog box by clicking on Change Password on the **EIM System Menu** menu bar.

Examples: JINGLE WHAT TOM249

Format: 1-6 alpha-numeric characters

**Processed**
Displays the current number of records processed during a loading of E2 Station or E3 Result records from the Interface System to the EIM System.

**Project(s)**
Project is one of the six EIM System Components.

A Project or survey is a planned activity or set of monitoring activities conducted for the purpose of collecting information about a given area or natural resource. Each project is uniquely identified by a Project Identification Code and Project Name.

Example: DDT monitoring in clam tissue in the southern Puget Sound area

An E1 Project is a project for which data are entered into the Interface System for potential migration to the EIM System .

**Project Access Level**
Indicates the type of access (R = READ; U = UPDATE) that a specific Project User Group has been granted for a Project.

**Project End Date**
The date on which a project was completed. Typically, this should be upon completion of any published reports.

Example: 12-12-1996

Format: MM-DD-YYYY

NOTE: You *must* enter the hyphens; otherwise an error message will appear.

**Project Identification Code**
Required Field

The identification code (combination of text and numbers) used by the Project Lead to *uniquely* identify the Project.

Examples: EILS567 SED8809

Format: 8 Basic Text characters

**Project Lab Cost Estimate**
An estimate of the approximate lab costs to be incurred by the project.

Example: $20,000

Format: 80 alpha/numeric characters

**Project Lead**
Required Field

The Ecology Person designated as the one responsible for the Project or the contact person for that Project.

Project Lead consists of the following two attributes:

Project Lead First Name:f Same as Ecology Person First Name

Project Lead Last Name: Same as Ecology Person Last Name

NOTE: You must select or correctly enter the first and last names of an Ecology Person from the **Ecology Person List Box**. Otherwise, an error message will be displayed that reads "Lead person could not be found".

**Project Lead First Name**
The first name of the Ecology Person with knowledge of the project and who can assist the public in finding additional information about a given project. It may be the project lead, the principle investigator, project staff, or a grant officer.

NOTE: You must select or correctly enter the first and last names of an Ecology Person from the **Ecology Person List Box**. Otherwise, an error message will be displayed that reads "Lead person could not be found".

**Project Lead First Name -- continued**

Examples: Russ John

Format: 20 alpha/numeric characters

*See also*
Project Lead

**Project Lead Last Name**
The last name of the Ecology Person with knowledge of the project and who can assist the public in finding additional information about a given project. It may be the project lead, the principle investigator, project staff, or a grant officer.

NOTE: You must select or correctly enter the first and last names of an Ecology Person from the **Ecology Person List Box**. Otherwise, an error message will be displayed that reads "Lead person could not be found".

Examples: Darr Tooley

Format: 20 alpha/numeric characters

*See also*
Project Lead

**Project Name**
Required Field

The name assigned to the Project by the Project Lead .

Examples: Radioactive poisoning in Hanford employees
DDT measurements for fish in the Lower Puget Sound area

Format: 60 Basic Text characters

**Project Program Code**
The code which identifies the Ecology Program which is primarily responsible for the project.

Examples: HWTUR EILS

Format: 10 alpha/numeric characters

**Project Purpose**
Required Field

A summary description of the purpose of, or the hypothesis to be tested by the project. It should include the reason(s) for initiating the project, plus its goals and expectations.

Example: This project will examine the amounts of DDT found in clam tissue samples in the Lower Puget Sound area. The intentions are to measure the effect the spill has had on the fish in the area.

Format: 254 alpha/numeric characters

**Project Quality Assurance (QA) Description**
A summary of the Quality Assurance Project Plan (QAPP) approved for the project. The QAPP must follow the guidance in Ecology Document 91-16, Guidelines and Specifications for Preparing Quality Assurance Project Plans and/or EPA Document 841-96-003, The Volunteer Monitor's Guide to Quality Assurance Project Plans.

A QAPP is required for Project QA Levels 3 and 4.

Format: 254 alpha/numeric characters

*See also*
Project Quality Assurance (QA) Level

**Project Quality Assurance (QA) Level**
Required Field

A number reflecting the perceived quality of the data associated with the project.

Values: 1 – 4

Each Quality Assurance Level (QAL) is described below. In order to be rated at a given level, the criteria for both Planning and Report documents must be met.

**Level 1** **Planning**: Informal QA Documentation or
No Documentation available
**Report**: Data report/spreadsheet

A QA *planning document* includes a description of the project, statements of project objectives, detailed sampling design including rational and sampling locations, and descriptions of, or references to, sampling, analysis and quality control procedures.

**Level 2** **Planning**: Basic/Boiler-Plate or Generic QA Planning Document
**Report**: Informal/summary project report available

A QA planning document includes a description of the project, statements of project objectives, detailed sampling design including rational and sampling locations, and descriptions of, or references to, sampling, analysis and quality control procedures.

**Level 3** **Planning**: QAPP or Equivalent
**Report**: Formal project report

A *Quality Assurance Project Plan (QAPP)* must follow the guidance in Ecology Document 91-16, Guidelines and Specifications for Preparing Quality Assurance Project Plans and/or EPA Document 841-B-96-003, The Volunteer Monitor's Guide to Quality Assurance Project Plans.

A *formal project report* is a document describing project objectives, procedures, results, conclusions and **assessment of the quality of the data**.

Both the QAPP and the formal project report must be available to the user.

Bibliographic citations should be provided (*see* ***Project Bibliography Dialog Box*** ).

**Level 4** **Planning**: Approved QAPP
**Report**: Peer reviewed project report

A *Quality Assurance Project Plan (QAPP)* must follow the guidance in Ecology Document 91-16, Guidelines and Specifications for Preparing Quality Assurance Project Plans and/or EPA Document 841-B-96-003, The Volunteer Monitor's Guide to Quality Assurance Project Plans.

A *formal project report* is a document describing project objectives, procedures, results, conclusions and **assessment of the quality of the data**. A *peer reviewed project report* means the report was checked or reviewed for accuracy and completeness by a supervisor or colleague with appropriate experience (does not require independent, outside scientific review, as for juried publications).

Both the QAPP and the formal project report must be available to the user.

Bibliographic citations should be provided (***see Project Bibliography Dialog Box*** ).

Examples:

Entering historical monitoring data; no formal QA documentation or project report is known. Assign QAL = 1

Ecology staff collects data during inspection, under a generic programmatic QAPP that covers typical inspections. Inspector writes report. Assign QAL = 2.

Multi-year watershed analysis, involving extensive monitoring, is supported by an approved QAPP. Formal project report is available. Assign QAL = 3. If report is peer reviewed, assign QAL = 4.

Intensive monitoring program associated with cleanup site is supported by an approved QAPP. Results exist, but there is no project report. Assign QAL = 1. When formal report is complete, change QAL = 3. When peer reviewed project report is completed, change QAL = 4.

Format: 1 numeric character

NOTE: Additional QA information/detail may be entered in the Project Quality Assurance Description .

**Project Resource Estimate**

An estimate of the human and other resources required for the project .

Example: Lead Investigator .5 FTE
Field Technician 1.0 FTE

Format: 80 alpha/numeric characters

**Project Results Description**
A brief summary of the results of the project. The fully detailed project report may be referred to by attaching the relevant bibliographic citation to the project.

Example: There was no detectable DDT in the livers of the fish in Lake Washington.

Format: 254 alpha/numeric characters

**Project Special Requirements**
Any special requirements the project may have.

Example: Samples must be taken between May 1 and July 31. Permission from the Canadian government must be obtained before collecting samples.

Format: 254 alpha/numeric characters

**Project Start Date**
Required Field

The date on which a project began.

Example: 12-12-1996

Format: MM-DD-YYYY

NOTE: You *must* enter the hyphens; otherwise an error message will appear.

**Project Station**
Defines the physical monitoring sites (points, lines or areas) or stations that are associated with a project . A station may be used by multiple projects. A station may have a project-specific name known as the Project Station Name.

Example: The monitoring project "DDDT concentration in clam tissue" will include stations ABC, DEF, and GHI.

**Project Station Name**
Required Field

The project-specific name defined by the Project Lead for a given station during the course of a specific project . It *may* be the same as the Station Identification Code. A Station that is associated with multiple projects may have multiple Project Station Names.

A Project Station Name must be *unique within a specific project;* but, a Project Station Name does *not* need to be unique *across* projects.

Example: MW1 (Station ABC will be referred to as MW1 during the current project.)

Format: 40 alpha/numeric characters

**Project Status Code**
The logical state describing the current condition of the project.

Values: Proposed
On Hold
Active
Data Completed
Completed

**Project User Group**
A group of users who have been given READ or UPDATE access to a Project and the data associated with that Project.

**Project User Group Name**
The name assigned to a Project User Group.

Examples: ALL USERS (includes each user who may access the EIM system. Only the EIM System Administrator has UPDATE rights to the ALL USERS Project User Group.)

SILVER LAKE – TEAM A

Format: 40 alpha/numeric characters

**Protected Fields**
Text boxes that are "grayed out" and cannot be INSERTed or UPDATEd either in the active window or until one or more conditions have been met. You may be able to INSERT or UPDATE them in another window.

Examples:

Latitude in the **Field Activities Insert/Update Dialog Box** may not be Inserted or Updated in this window, but it may be in the **Stations Window**.

In the **Stations Window**, Well Station on the Menu Bar and the Wesll Station Pushbutton are not active unless the highlighted station is a Well Station (i.e. there is a check mark ( ) in the box called Well Station Indicator Flag).

**Range**
The term "Range" refers to the Range of the Section Township Range (STR ) Grid System. A range is a single series or row of townships, each six miles square, extending parallel to and numbered east and west from a survey base meridian line.

**Range Direction Code**
Required Field if using Section Township Range Coordinate Referencing System

The east or west direction of the Range in which the Station is located.

Choose "Range Direction Code" from the drop-down option box in the STR Insert/Update Dialog Box.

Values: E (East) W (West)

Format: 1 alpha character

NOTE: If you change the Range Direction Code when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Range Number**
Required Field if using Section Township Range Coordinate Referencing System

The Range row (X-axis) of the Range in which the Station is located.

Values: 1 - 47

Format: 2 numeric characters

NOTE: If the range number contains a value for a half-range, you must determine the latitude and longitude from an external source (e.g. a US Geological Survey quadrangle map).

NOTE: If you change the Range Number when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Reference Tables**
Reference Tables is one of the six EIM System Components.
It consists of a number of tables (e.g. Characteristics, Taxon, Methods) that are called by other procedures in the system.

**Region**
The term “Region” identifies the Ecology Regional Office in which the Station is located.

**Region Code**
No entry needed. The program "Skipper" will populate this field.

The Ecology Regional Office in which the Station is located.

If you wish to enter a Region Code for a Station, click on the prompt and choose the appropriate code from the drop-down list box of the Combined Code Table named **Region**.

| | | |
|---|---|---|
| Code Values: | CRO | Central Regional Office |
| | ERO | Eastern Regional Office |
| | NWRO | Northwest Regional Office |
| | SWRO | Southwest Regional Office |

Format: 3 or 4 alpha characters and text name

**Rejected Result Indicator**
Indicates whether a user has rejected a particular result (Sample or Measurement) for a specific Project. In order to complete the rejection of a result, the user also must enter a reason for the rejection in either of two attribute text fields, Result Validation Method Description or Result Value Description (Comment).

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES, Rejected); lack of a = "N" (=NO, not Rejected).

**Reporting System**
Reporting System is one of the six EIM System Components.
The user may enter query criteria and produce various reports based on the resulting matching records.

**Result**
Specific information about an environmental characteristic determined by field measurement(s), observation(s), or analytical procedure(s) performed on samples. Results for the basis of the analysis that is performed during a project to test a hypothesis.

Example: 1.04 ppm of Cadmium was found in Sample xyz by Manchester Lab.

*See also*
E3 Result Reported Value
E3 Result Instrument Value
E3 Result "Stored As" Value
Result Reported Value
Result Instrument Value
Result "Stored As" Value

**Result Analysis Date**
Required Field

The date that the result was analyzed by the laboratory. This can be important where the delay between sampling and analysis might affect the measured result.

Example: 11-17-1997

Format: MM-DD-YYYY
You must enter the hyphens.

**Result Analysis Time**
The time that the result was analyzed by the laboratory. This can be important where the delay between sampling and analysis might affect the measured result.

Example: 04:24:16 16:03:00

Format: HH:MI:SS (hours, minutes, seconds) in military time
NOTE 1: You must enter the colons.
NOTE 2: If you enter only HH:MI, the system completes the entry with ":00".

**Result Comment**
Brief textual comments about the result.

Format: 254 alpha/numeric characters

**NOTE re GROUND WATER LEVEL**: For the characteristic WATER LEVEL IN WELL there are 16 result qualifiers, (use only the letter code) which may be added to the COMMENT field. They are:

| | |
|---|---|
| D | The site was dry (no water level is recorded) |
| E | The site was flowing recently |
| F | The site was flowing, but the head could not be measured |
| G | A nearby site that taps the same aquifer was flowing |
| H | A nearby site had been flowing recently |
| I | Injector site (recharge water being injected) |
| J | Injector site monitor (a nearby site is injecting) |
| N | The measurement was discontinued |
| O | An obstruction was encountered in the well |
| P | The site was being pumped |
| R | The site has been pumped recently |
| S | A nearby site was being pumped |
| T | A nearby site had been pumped recently |
| V | Foreign substance was present on the water |
| W | The well was destroyed |

Z Other conditions that could affect the measured level

**Result Confidence Level Percent Measure**

The confidence interval associated with numeric Result Reported Value, if appropriate

Permitted Values:

90 95 99 99.9

Format: 2 numeric characters and one decimal place

**Result Data Qualifier Code**

Required Field

A code associated with numeric Result Reported Value data reported by laboratories. The value is used for quality assurance/quality control purposes. While not all data are qualified, appropriate data qualifiers must be entered for any results qualified by the lab doing the analysis.

Example:

| | |
|---|---|
| E | Reported result is an estimate. |
| G | Value is greater than result reported. |
| J | The analyte was positively identified. The associated numerical result is an estimate. |
| J? | Translation of a data qualifier that does not exist in EIM, but which may be reasonably interpreted as "*the analyte was positively identified. Consider the associated numerical an estimate*." The original definition may have varied, but the intent was to treat the positively identified result as an estimate. |
| N | For organic analytes, there is evidence the analyte is present in this sample. |
| NAF | Not analyzed for. |
| NC | Not calculated. |
| NJ | There is evidence that the analyte is present. The associated numerical result is an estimate. |
| QNS | Quantity not sufficient. |
| REJ | Data are unusable for all purposes. |
| R? | Translation of a data qualifier that does not exist in EIM, but which may be reasonably interpreted as "*the analyte is unreliable and therefore unusable.*" The original definition may have varied, but the intent was to denote the result as unreliable and therefore unusable. |
| U | The analyte was not detected at or above the reported result. |
| U? | Translation of a data qualifier that does not exist in EIM, but which may be reasonably interpreted as "*the analyte was not detected at or above the reported result*." The |

original definition may have varied; but the intent was to denote the result as not detected.

UJ The analyte was not detected at or above the reported estimated result.

UJ? Translation of a data qualifier that does not exist in EIM, but which may be reasonably interpreted as "*the analyte was not detected at or above the reported estimated result*." The original definition may have varied; but the intent was to denote the result as not detected at the estimated level reported.

Format: 3 alpha/numeric characters

**Result Instrument Value**

The measured value for a test *as recorded by the equipment*.

This value may be different from the analysis result, Result Reported Value where other circumstances, such as method detection limit, which may affect the ability to report an analyte. In such a case, the analyst may record (1) a method detection limit value as the Result Reported Value together with (2) a Result Data Qualifier Code, and (3) the actual machine-determined value as the Result Instrument Value Measure.

Example: 0.4300000

Format: 8 numeric characters and 7 decimal places

**Result Reported Value**

Required Field

The actual reported value with the reported decimal places. This may be a method limit or the instrument reading.

When used, this value *must* be used in conjunction with the characteristic and units of measure, UOM Result Short Form Name.

Examples: 1.50 .330

Format: 10 alpha/numeric characters

**Result Sample Fraction**
The type of fractionation used to assess the sample and determine a result for a characteristic. Fractionation is the separation (of a chemical compound) into components, as by distillation or crystallization.

Permitted Values:
Suspended
Total
Dissolved
Total Recoverable
HF Total

Format: 15 alpha/numeric characters

**Result "Stored As" Value**
The numeric representation of the result of the Result Reported Value.

Example: 0.3000000

Format: 8 numeric characters and 7 decimal places

**Result Unidentified Species Code**
A "placeholder" taxonomic identification for the sample. Used with a valid genus name to indicate that a unique species has been observed but not taxonomically identified.

EIM Permitted Values:
SP.1, SP.2, SP.3, SP.4, SP.5, SP.6, SP.7, SP.8, SP.9, SPP.

Format: 10 alpha/numeric characters

**Result Validation Method Description**
A brief description of the validation method that was used for the sample result.

Example: Lab-generated duplicates

Format: 254 alpha/numeric characters

**Result Value Description (Comment)**
A textual description of the result.

Example: Cloud cover is approximately 20%.

Format: 254 alpha/numeric characters

**Sample**
A sample involves something extracted from its environmental setting using some type of equipment. A sample result has a numerical value obtained using analytical methods.

Sampling is the act of taking one or more samples. Sampling is one of three types of field activity. The other two types are Measurement and Observation.

**Sample Chain of Custody Flag**
Required Field

Indicates whether or not a chain of custody is required for the sample. Chain of custody information is typically required where the results from the sample are to be used for enforcement action purposes. Such samples will be subject to more rigorous control and management procedures than might normally be applied.

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES, required); lack of a = "N" (=NO, not required).

**Sample Chemical Preservation Method**
The name of the chemical or physical preservation method used to preserve the sample.

Example: Refrigeration

Format: 15 alpha/numeric characters

**Sample Composite**
Required Field

A sample composite is a single aggregate sample created from the combination of a number of other discrete samples. Within EIM, the user may include just the composite sample, or the user also may fully describe each of the constituent discrete samples that make up the composite.

Example: Sample 123 was made up of 30% Sample 433 and 70% Sample 334.

**Sample Composite Description**
Brief description of the procedure used to form the sample composite.

Format: 254 alpha/numeric characters

**Sample Composite Flag**
Indicates whether the sample represents a combination or composite of other samples

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES); lack of a = "N" (=NO).

**Sample Composite Interval**
Describes the length of time or distance between the collections of the samples used to form the sample composite.

Examples: Every 10 centimeters
Every 30 minutes
Once every hour for six hours

Format: 40 alpha/numeric characters

**Sample Composite Type**
Required Field (if the sample is a composite)

A brief indication of the type of composite, if any, that the sample represents.

Select from list of permitted values.

Examples: Horizontal
Time

Format: 15 alpha/numeric characters

**Sample Identification Number**
EIM Required Field

A code to identify a sample that is assigned by the project scientist. This number may be a randomly selected number by the sampler or it may be a pre-assigned number designated by the laboratory.

Example: AIR9098

Format: 12 alpha/numeric characters

**Sample Matrix**
EIM Required Field

Describes the form of the sample.

Select from list of permitted values.

Examples: Air/Gas
Tissue
Water
Other Liquid

Format: 14 alpha/numeric characters

**Sample Refrigerated Temperature Quantity**
The temperature at which the sample was refrigerated.

This field must be used in conjunction with the sample unit of measure named UOM Sample Short Form Name.

Examples: 0 18

Format: 3 numeric characters

**Sample Replicate Flag**
Indicates whether a replicate sample (a sample of the same type and medium taken at the same time and place, using the same method) exists. Replicate samples may have the same Sample Identification Number in certain instances.

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES); lack of a = "N" (=NO).

**Sample Source**
Indicates the environmental resource from which the sample was taken and which might be most directly characterized by the results from the sample.

Examples: Groundwater
Surface water
Air
Marine Sediment

Format: 20 alpha/numeric characters

**Sample Split**
A single collected sample that is divided in the field into several sub-samples or splits. Each of the splits is related to its siblings by belonging to a sample split grouping.

**Sample Split Comment (Reason)**
The reason for splitting the sample or other comments about the sample split.

Example: To calibrate testing equipment.

Format: 60 alpha numeric characters

**Search Radius**
A distance criterion, the radius from the coordinates which the system will use when conducting a search for matching Stations.

Choose from one of three option buttons.

Values in **Station Search Criteria Dialog Box** and in **Facility/Site Search Detail Dialog Box**

1/4 mile – default radius value
1/2 mile
1 mile

Values in **EIM Query/Report Module and Dialog Box**:

1/2 mile – default radius value
1 mile
5 mile

**Section**
The term "Section" refers to the Section of the Section Township Range (STR ) Grid System. A section is one of 36 units of land comprising a township. Each section is one square mile and contains 640 acres.

Each section is divided into quarter sections of 160 acres.

**Section Number**
Required Field if using Section Township Range Coordinate Referencing System.
The Section of the Section Township Range (STR ) Coordinate System in which the Station is located.

Value range: 1 - 36

Format: 2 numeric characters

NOTE: If you change the Section Number when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Select All Columns Indicator**
A flag (i.e. a check mark [ ] by which the user indicates that all columns listed in the **Advanced Report Builder List Box** are to be exported to Excel or Access, whichever the user chooses.

**Select All Indicator**
An indicator that you wish to perform a multiple update or load process on ALL the records in the batch, regardless of how many are highlighted in the **E2 Station Record List Box** or the **E3 Result Records List Box**. A check mark ( ) in the Select All Indicator box activates the Multiple Updates Pushbutton.

**Single Screen Set**
Includes all the records available to you in a list box via the scroll bar between the LIST PREVIOUS and the LIST NEXT buttons.

**Skipper**
"Skipper" is the common name for a program named Facility/Site Maintenance. Skipper is an integral part of the Facility/Site Identification System and the EIM System that helps to ensure the accuracy of geographic location information. Such accuracy is critical to Ecology staff in locating a particular facility/site or station.

Very early each Tuesday through Saturday, "Skipper" accesses the GIS to perform a verification function on the geographic location information entered the previous day. If "Skipper" verifies the geographic coordinates, it places a flag in the system and a " " in a box next to the words "GIS Verified " that appears in DETAIL windows of the Facility/Site Identification System and the EIM System. It also populates certain other location information fields including:

CountyCongressional DistrictIndian Land (in the Facility/Site Identification System)
Legislative DistrictWRIA Id
Region.

Skipper sends each data entry person a list detailing the successes, failures (if it cannot verify the coordinates), and warnings.

**SPCS**
The State Plane Coordinate Systems are designed to define the location of points within a geographic grid system. Each state has at least one SPCS system in use; Washington has two, a northern zone system and a southern zone system. The X coordinate is the east-west (Easting) coordinate; the Y coordinate is the north-south (Northing) coordinate. If the horizontal datum is NAD27, the unit of measure is feet; if the horizontal datum is NAD83, the unit of measurement is meters.

**SPCS X Coordinate**
(State Plane X Coordinate)

Required Field if using State Plane Coordinate Referencing System

The easterly (X-axis) coordinate of the Station in the WA State Plane Coordinate System (SPCS ).

Range: 942431.750 - 2911056.000

Format: 7 numeric characters and 3 decimal places

NOTE: If you change the SPCS X Coordinate when you are in UPDATE mode, then the Location (Horizontal) Accuracy Level must be more accurate (a lower code number) than the previous one.

**SPCS Y Coordinate**
(State Plane Y Coordinate)

Required Field if using State Plane Coordinate Referencing System

The northerly (Y-axis) coordinate of the Station in the WA State Plane Coordinate System (SPCS).

Range: 81928.719 - 1355596.000

Format: 7 numeric characters and 3 decimal places

NOTE: If you change the SPCS Y Coordinate when you are in UPDATE mode, then the Location (Horizontal) Accuracy Level must be more accurate (a lower code number) than the previous one.

**SPCS Zone Code**
(State Plane Zone Code)

Required Field if using State Plane Coordinate Referencing System

A code that identifies whether the coordinates of the Station lie in the northern zone or the or southern zone of the WA State Plane Coordinate System (SPCS ) .

Choose the appropriate SPCS Zone Code from the drop-down option box in the SPCS Insert/Update Dialog Box .

The area included in the following counties constitutes the north zone: Chelan, Clallam, Douglas, Ferry, Island, Jefferson, King, Kitsap, Lincoln, Okanogan, Pend Oreille, San Juan,

Skagit, Snohomish, Spokane, Stevens, Whatcom, and that part of Grant lying north of parallel 47° 30' north latitude.

The area included in the following counties constitutes the south zone: Adams, Asotin, Benton, Clark, Columbia, Cowlitz, Franklin, Garfield, that part of Grant lying south of parallel 47° 30' north latitude, Grays Harbor, Kittitas, Klickitat, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum, Walla Walla, Whitman and Yakima.

Values: N (North)
S (South)

Format: 1 alpha character

NOTE: If you change the SPCS Zone Code when you are in UPDATE mode, then the Location (Horizontal) Accuracy Level must be more accurate (a lower code number) than the previous one.

**Station(s)**
Stations is one of the six EIM System Components.

A Station identifies the location of the sample collection, measurement, or observation. It may be an area, a line, or a point. A Station must include one latitude/longitude reference point. For ocean monitoring, a station may be a point at sea defined by latitude and longitude. For groundwater monitoring, as station may be a well that may be identified by name, number, latitude, and longitude. For biological monitoring, a Station may be a sample area defined as plus or minus X yards from a fixed point.

Each station is uniquely identified by a Station Identification Code and a Station Name.

A Station *may* but is not required to be associated with a Project. Each Station that is associated with a Project is called a "Project Station " and is accessible through the Projects component of the EIM System. Each Project Station has a Project Station Name. This name may be the same as its Station Name or it may be entirely different.

*All S*tations, regardless of whether they are associated with a Project, are accessible through the Stations component of the EIM System.

**Station Alias**
An alternative name assigned to a specific station by an agency other than Ecology.

Example: The USGS Site ID for a well

**Station Alias Code**
Required Field – if Station has a Station Alias

A Station code identifier assigned to the Station Alias by another organization such as the US Environmental Protection Agency (EPA). A Station Alias Type Code that identifies such an organization may be associated with a Station Alias Code.

Examples: 13102060
481322122302201
Both of the above codes are examples of Station Alias Codes assigned by the USGS.

Format: 40 alpha/numeric characters

**Station Alias Type**
Identifies the organization which assigned the Station Alias and an associated Station Alias Code.

**Station Alias Type -- continued**
Select from list of permitted values.

| Examples: | | |
|---|---|---|
| | CLAIM | Claim alias name |
| | COUNTY | County/Local regional specific alias name |
| | DOH | WA State Department of Health |
| | EPA | US Environmental Protection Agency |
| | OTHERS | Others |
| | USGS | US Geological Survey Site Identification Number |

**Station Capped Flag**
An indicator stating whether or not a Station has been capped. This is of concern to the Sediment Media Group.

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES, capped); lack of a . = "N" (=NO, not capped).

**Station Dredged Flag**
An indicator stating whether or not a Station has been dredged. This is of concern to the Sediment Media Group.

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES, dredged); lack of a = "N" (=NO, not dredged).

**Station Identification Code**
Required Field

The identification code used by the responsible person, typically the Project Lead, to *uniquely* identify the Station. The Station Identification Code may be overridden during the course of a Project by a project-specific name that will not affect its universal code.

INSTRUCTION: If the Station is a Well Station , use the Well Identification Number , if available.

Examples: EILS567 SED8809 12A070 12101100

Format: 8 alpha/numeric characters

**Station Index Number**
A code (alternative to Station Waterbody ID ) used to indicate the waterbody on which the Station is located if appropriate. This index number will be developed from the 1:24,000 state GIS hydrography layer when this has been established.

Example: 12997766

Length: 10 alpha/numeric characters

**Station Location Type**
Required Field

A description of the location of the Station, in relation to air, land, and water. A Station may only be described by one location type. The purpose or function of the Station is described by the 'source' defined for each of the samples taken at the Station.

Click on the down-arrow to display a drop-down list of choices. Highlight and click on the appropriate status to select it.

Examples: Lake, Estuary, Freshwater Wetland, Spring, River/Stream

Format: 20 alpha/numeric characters

**Station Name**
Required Field

The name used by the responsible person, typically the Project Lead, to identify the Station .

Examples: Jones Point Station

Format: 40 alpha/numeric characters

**Station River Mile**
A system used to indicate the location of a Station on a river/stream by indicating the distance from the mouth of the river or stream.

Examples: 3 32 429 1234

Format: 4 numeric characters

NOTE: Which river mile system (and its format) will be the ones ultimately selected for use in the EIM System are under consideration and discussion. Therefore, the format and examples shown above may change in the future.

**Station Spatial Type**
Identifies which of three spatial types describes the Station.

Click on the option button which best describes the spatial type of the station.

Values: P = Point (default value)
L = Line
A = Area

Format: 1 alpha character

**Station Status**
Required Field

Current status of the Station.

Click on the down-arrow to display a drop-down list of choices. Highlight and click on the appropriate status to select it.

Values: Active
Inactive
Seasonal

**Station Waterbody ID**
A unique code used to indicate the waterbody on which the Station is located, if appropriate.

Station Waterbody IDs (code and description) are contained in a Combined Code Selection Table.

Example: WA-01-0070 Lummi Bay and Hale Passage

Format: 10 alpha/numeric characters

NOTE: Which waterbody identification system (and its format) will be the one ultimately selected for use in the EIM System are under consideration and discussion. Therefore, the format and examples shown above may change in the future.

**STR**

The Section Township Range Grid System is the system by which the federal government began in 1785 surveying land west of the original 13 states and has continued to do so. Land is divided into units of 36 square miles called townships . Each township is further divided into 36 sections of 1 square mile. Each section, containing 640 acres, is divided into quarter sections of 160 acres. To help located and describe any particular piece of land, surveyors use certain meridians of longitude (north-south lines), called *principal meridians*, and certain parallels of latitude (east-west lines), called *base lines*. All townships lying in a line from north to south are described as a range.

**STR Quarter Section 1**

The first quarter section of the Section Township Range (STR ) Grid System in which the Station is located.

Choose the appropriate value for STR Quarter Section 1 from the drop-down option box in the STR Insert/Update Dialog Box.

Values: NE NW SE SW

Format: 2 alpha characters

NOTE: If you change STR Quarter Section 1 when you are in UPDATE mode, then the Location (Horizontal) Accuracy Level must be more accurate (a lower code number) than the previous one.

**STR Quarter Section 2**

The second quarter section of the Section Township Range (STR ) in which the Station is located.

Choose the appropriate value for STR Quarter Section 2 from the dropdown option box in the STR Insert/Update Dialog Box.

Values: NE NW SE SW

Format: 2 alpha characters

NOTE: If you change STR Quarter Section 2 when you are in UPDATE mode, then the Location (Horizontal) Accuracy Level must be more accurate (a lower code number) than the previous one.

**STR Quarter Section 3**
The third quarter section of the Section,Township Range (STR ) in which the Station is located.

Choose the appropriateSTR Quarter Section 3 from the dropdown option box in the STR Insert/Update Dialog Box .

Values: NE NW SE SW

Format: 2 alpha characters

NOTE: If you change STR Quarter Section 3 when you are in UPDATE mode, then the Location (Horizontal) Accuracy Level must be more accurate (a lower code number) than the previous one.

**Study Area**
The point, line, or more usually, the area which is the focus of the Project. An example is Lower Puget Sound.

**Study Area Activation Date**
The date on which the spatial area was first used actively as an area of interest to Ecology for monitoring purposes.

Example: 03-15-1996

Format: MM-DD-YYYY
You must enter the hyphens.

**Study Area Description**
A brief description of the spatial area where the project is located.

Example: Lower Nooksack Watershed and Sumas aquifer

Format: 254 alpha/numeric characters

**Study Area Name**
Required Field if Project involves a defined study area (e.g. HUC, WRIA)

The common name assigned to the area of interest

Example: Lower Puget Sound area

Format: 30 alpha/numeric characters

**Study Area Type**

Required Field if Project involves a defined study area (e.g. HUC, WRIA)

A brief code describing the general nature of the spatial area.

Examples: Lake, Aquifer, Mountain, Ocean, River, Stream

Format: 30 alpha/numeric characters

**Study Area Spatial Type Indicator**

An indicator describing the primary nature of the spatial area as a point, line, or area.

Values: P = Point
L = Line
A = Area

Format: 1 alpha/numeric

**Successfully Loaded**

The number of E2 Station or E3 Result records that were successfully loaded from the Interface System to the EIM System. The difference between the To Be Loaded number and the Successfully Loaded number is the number of records that were assigned an Interface Load Status Code of "Rejected".

**System User ID**

The system identification number of a user. Typically this will be the same as the user's network login id.

Example:

| User ID | User Name |
|---|---|
| JT00461 | John Tooley |
| RDAR461 | Russ Darr |

Format: 8 alpha/numeric characters

**System User ID (Security System)**

The system identification number of a user within the EIM and Facility/Site Security System (SARGE). Typically this will be the same as the user's network login id. The System User ID (Security System) is associated with a System User Name (Security System) . Both may pertain to an individual or a position title.

Example:

| System User ID | System User Name |
|---|---|
| RDAR461 | Russ Darr |
| JTOO461 | John Tooley |
| EMADMIN | EIM Administrator |

Format: 7 alpha/numeric characters

**System User Name (Security System)**

The name of a user in the EIM and Facility/Site Security System (SARGE). The System User Name (Security System) is associated with a System User ID (Security System). Both may pertain to an individual or a position title.

| Example: | System User Name | System User ID |
|---|---|---|
| | Russ Darr | RDAR461 |
| | John Tooley | JTOO461 |
| | EIM Administrator | EMADMIN |

Format: 50 alpha/numeric characters

**Taxon**

The international taxonomic reference given to a specific level of the taxonomic classification system (e.g. Mammalia). The reference may be to any Taxon Level (e.g. kingdom, order, genus, etc.) Taxon (plural is taxa) refers to a group of organisms sharing common characteristics in varying degrees of distinction that constitute a Taxon Level.

**Taxon Function Description**

The primary biological function attributed to the organism.

Example: Bottom feeder

Format: 30 alpha/numeric characters

**Taxon ITIS Code**

Required Field

This field is not strictly the Integrated Taxon Identification System Code. It may be one of two codes. If you are entering data about a freshwater organism, use the IT IS Code which is a 6-character code. If you are entering data about a marine organism, use the National Ocean Data Center (NODC) code which is generally a 4-character code.

Although this is the true 'business' identifier, in practice it cannot be used as such because of the requirement to temporarily create taxa without a predefined ITIS code.

Example: 114082 (ITIS Code for GENUS Acneus)

Format: Up to 10 numeric characters; 0 decimal places

**Taxon Level**
Required Field

The taxonomic level of the subject taxa (e.g. kingdom, class).

Permitted values:

Kingdom
Phylum
Class
Order
Family
Genus
Species

Format: 7 alpha/numeric characters

**Taxon Name**
Required Field

The full Latin name given to the taxonomic level of the subject taxon .

Examples: Arthropoda
Homo Sapiens

Format: 30 alpha/numeric characters

**Taxon Tolerance Description**
Descriptive information about the expected or known tolerance of the organism to environmental change or damage.

Example: (An example is not currently available)

Format: 30 alpha/numeric characters

**Tissue Based Indicator**
A search criteria flag (i.e. a check mark [ ] by which the user indicates that matches should be returned only for those results which have an entry in the text box for the attribute named Tissue (Type Description) in the **Field Activity Sample Details Dialog Box** or the **Field Activity Sample Insert/Update Dialog Box**.

**Tissue Type**
Indicates, for samples of biological tissue, the various body parts that might be sampled. These tissue types are organized by “kingdom”. Bark and liver are examples of plant and animal tissue types, respectively.

**Tissue Type Description**
Brief description of a Tissue Type that is associated with a Kingdom and Organ System.

Examples: Nervous tissue
Spores
Food System

Format: 40 alpha/numeric characters

**Tissue Type Kingdom**
Required Field

High level categorization of a set of Tissue Types .

Permitted Values:
Algae
Animal
Non-vascular Plant
Vascular Plant

Format: 20 alpha/numeric characters; case sensitive

**Tissue Type Organ System**
Required Field

General categorization of the set of plant or animal organs to which the Tissue Type belongs.

| Examples: | **Kingdom** | **Organ System** | **Tissue Type** |
|---|---|---|---|
| | Animal | Cardiovascular | Blood(plasma) |
| | | | Blood (whole) |
| | | | Heart |
| | | Nervous, Sensory System | Brain |
| | | | Ear |
| | | | Eye |
| | | | Nerve Tissue |

Format: 45 alpha/numeric characters; case sensitive

**Township**
The term "Township" refers to township in the Section Township Range (STR ) Grid System. A township is a land unit of 36 square miles or 93 square kilometers. It is comprised of 36 sections of 1 square mile (640 acres) each.

**Township Direction Code**
Required Field if using Section Township Range Coordinate Referencing System

The north or south direction of the Township in which the Station is located.

Choose "Township Direction Code" from the drop-down option box in the STR Insert/Update Dialog Box .

Values: N (North)
S (South)

Format: 1 alpha character

NOTE: If you change the Township Direction Code when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Township Number**
Required Field if using Section Township Range Coordinate Referencing System

The Township row (Y-axis) of the Township in which the Station is located.

Values: 1 - 41

Format: 2 numeric characters

NOTE: If the township number contains a value for a half-township, you must determine the latitude and longitude from an external source (e.g. a US Geological Survey quadrangle map).

NOTE: If you change the Township Number when you are in UPDATE mode, then the Horizontal Accuracy Level must be more accurate (a lower code number) than the previous one.

**Underground Unit**
The name of a stratum characterized by consolidated on unconsolidated rock containing a degree of lithologic, geologic, or hydrogeologic homogeneity. The unit is one of three possible types, each sharing the same basic characteristics and therefore the same entity type. These types are GEOLOGIC, LITHOLOGIC, and HYDROGEOLOGIC.

Examples: The Toutle aquifer
The Watkinson shale beds

**Underground Unit Code**
The unique code assigned to an underground unit.

NOTE: The only Underground Unit Type that the EIM System is currently using is Lithologic. Its subset is a mixture of United States Geological Survey (USGS), which is composed of four characters, and the Unified Soil Classification Codes, which is composed of two characters).

*You should be consistent in their use, that is, use one but not both on the same well.*

| | | | |
|---|---|---|---|
| Examples: | BLDR | = | BOULDER |
| | CL | = | CLAYS INORGANIC <50% LIQUID |
| | CLAY | = | CLAY |
| | GC | = | GRAVELS CLAYEY |

Format: Up to 12 alpha/numeric characters

**Underground Unit Local Name**
Required Field

The name by which the underground unit is known locally.

Example: If the Silver Springs Aquifer is known locally as Aquifer A, then the local name would be Aquifer A.

Format: 80 alpha/numeric characters

**Underground Unit Name**
The official name of an underground unit.

NOTE: The only Underground Unit Type that the EIM System is currently using is Lithologic. Its subset is a mixture of United States Geological Survey and the Unified Soil Classification system.

*You should be consistent in their use, that is, use one but not both on the same well.*

| | | | |
|---|---|---|---|
| Examples: | BLDR | = | BOULDER |
| | CL | = | CLAYS INORGANIC <50% LIQUID |
| | CLAY | = | CLAY |
| | GC | = | GRAVELS CLAYEY |

Format: 120 alpha/numeric characters

**Underground Unit State Code**
The Washington State-defined code that represents the underground unit.

Examples: (An example is not currently available)

Format: 6 alpha/numeric characters

**Underground Unit Type**
Required Field

Indicates whether the underground unit is of the geologic, hydrogeologic, or lithologic type.

Values: GEOLOGIC
HYDROGEOLOGIC
LITHOLOGIC

Format: 13 alpha characters

**Unit of Measure (UOM)**
Unit abbreviation that represents the measurement scale that accompanies or is associated with a numeric value.

| | UOM | **UOM Description** |
|---|---|---|
| Examples: | ppm = | parts per million |
| | cm = | centimeter |
| | m = | meters |
| | kg = | kilograms |

**UOM Description**
Required Field

Brief description of the Unit of Measure.

| Examples: | **UOM Description** | **UOM** |
|---|---|---|
| | parts per million | ppm |
| | centimeters | cm |
| | meters | m |
| | kilograms | kilograms |

Format: 50 alpha/numeric characters; case sensitive

**UOM Field Activity Short Form Name**
The abbreviation for the name of the unit of measure (UOM ) associated with the field activity of depth measurement, Field Activity Upper Depth Quantity or Field Activity Lower Depth Quantity.

| | | |
|---|---|---|
| Examples: | cm | centimeters |
| | km | kilometers |
| | Nmi | Nautical miles |

Format: 10 alpha/numeric characters; case sensitive

*See also*
**UOM Short Form Name**

**UOM Result Short Form Name**
The abbreviation for the name of the unit of measure (UOM ) associated with the characteristic result measurement, Result Value Measure.

| | | |
|---|---|---|
| Examples: | #/cm3 | Number per cubic centimeter |
| | Gal/min | Gallons per minute |
| | ML/L | Milliliters per liter |
| | Ppm | Parts per million |

Format: 10 alpha/numeric characters; case sensitive

*See also*
UOM Short Form Name

**UOM Sample Short Form Name**
The abbreviation for the name of the unit of measure (UOM ) associated with the sample refrigeration temperature measurement, Sample Refrigerated Temperature Quantity.

Permitted Values:

| | |
|---|---|
| deg C | Degrees Centigrade |
| deg F | Degrees Fahrenheit |
| deg K | Degrees Kelvin |

Format: 10 alpha/numeric characters; case sensitive

*See also*
UOM Short Form Name

**UOM Short Form Name**
Required Field

The abbreviation for the name of the Unit of Measure (UOM).

| | | |
|---|---|---|
| Examples: | cm | centimeters |
| | deg C | Degrees Centigrade |
| | ML/L | Milliliters per liter |

Format: 10 alpha/numeric characters; case sensitive

*See also*
UOM Field Activity Short Form Name
UOM Result Short Form Name
UOM Sample Short Form Name

**UOM Type**
Required Field

Provides categorization of a Unit of Measure. This category is used when the unit is associated with a result value to validate the characteristic associated with that result.

Permitted Values:

| | |
|---|---|
| ALL | |
| AREA | |
| FLOW | |
| LEN | Length |
| MISC | |
| PROD | Production |
| RAD | Radiation |
| SUBST | |
| TAX | |
| TEMP | Temperature |
| TIME | |
| VEL | Velocity |
| VOL | Volume |

Format: 10 alpha/numeric characters; case sensitive

**User Location Verified Flag**

An Ecology program staff person enters an "  " in this box to indicate: (1) the geographic location and other calculated data of a Station have been reviewed subsequent to its GIS verification by "Skipper" and (2) the geographic location and other calculated data have either been accepted or researched and overridden.

Click on the text box to place a  in the box or to remove an existing  .

Format:  in box = "Y" (= YES, verified); lack of a  = "N" (=NO, not verified).

An Ecology program staff person enters an "  " in this box to indicate: (1) the geographic location and other calculated data of a Station have been reviewed subsequent to its GIS verification by "Skipper" and (2) the geographic location and other calculated data have either been accepted or researched and overridden.

Click on the text box to place a  in the box or to remove an existing  .

Format:  in box = "Y" (= YES, verified); lack of a  = "N" (=NO, not verified).

**UTM**

The Universal Transverse Mercator (UTM) Grid System provides rectangular coordinates that may be used to indicate locations on the surface of the earth. A point is located by specifying a hemispheric indicator, a zone number, an easting value, and a northing value. The unit of measurement for both Northing and Easting is in meters.

**UTM X Coordinate**

(Universal Transverse Mercator X Coordinate)

Required Field if using the Universal Transverse Mercator Coordinate Referencing System
The easting (X-axis) coordinate of the Station in the Universal Transverse Mercator (UTM) Grid System (i.e. horizontal distance from the reference edge of the UTM zone) of the station . The unit of measure is meters.

Range:  363487.031 - 971166.625

Format:  6 numeric characters and 3 decimal places

NOTE: If you change the UTM X Coordinate when you are in UPDATE mode, then the Location (Horizontal) Accuracy Level must be more accurate (a lower code number) than the previous one.

**UTM Y Coordinate**
(Universal Transverse Mercator Y Coordinate)

Required Field if using the Universal Transverse Mercator Coordinate Referencing System

The northing (Y-axis) coordinate of the Station in the Universal Transverse Mercator (UTM) Grid System (i.e. the vertical distance from the equator) of the station . The unit of measure is meters.

Range: 5043595.500 - 5444537.000

Format: 7 numeric characters and 3 decimal places

NOTE: If you change the UTM Y Coordinate when you are in UPDATE mode, then the Location (Horizontal) Accuracy Level must be more accurate (a lower code number) than the previous one.

**UTM Zone Code**
(Universal Transverse Mercator Zone Code)

Required Field if using the Universal Transverse Mercator Coordinate Referencing System

Identifies the zone number of the Universal Transverse Mercator (UTM) Grid System that indicates the 6 degree longitudinal band in which the Station is located.

Choose the appropriate UTM Zone Code from the drop-down list box in the **Universal Transverse Mercator Insert/Update Dialog Box**.

Values: 11, or 10 (The State of Washington falls within zones 10 and 11)

NOTE: Although the value of 0 appears in the drop-down list box, it is NOT a valid enter when UTM coordinates are specified. If you enter UTM coordinates, you MUST enter a zone code of 10 or 11. If you enter coordinates and leave the Zone Code as 0, you will receive an error message.

Format: 1 or 2 numeric characters

NOTE: If you change the UTM Zone Code when you are in UPDATE mode, then the Location (Horizontal) Accuracy Level must be more accurate (a lower code number) than the previous one.

**Version**
The currently active version of the EIM System on the server. If, after comparing this version with the one on your PC, the EIM System finds that your PC does not have the most current version, a message will appear on your screen advising you to download the most recent version.

Example: 1.0 1.2

**Vertical Accuracy Level**
A code for the range within which the measured value of the longitude of the Station may vary from the actual value.

Choose "Vertical Accuracy Level" from the drop-down list box in the Combined Code Table named **Vertical Accuracy Level**.

Code range: 01-13, plus 99 = "Unknown"

Examples: 01 = >1/100 Meter
06 = +/- 40 feet (12 meter)

Format: 2 numeric characters

**Vertical Collection Method**
The technique used to collect the vertical coordinate of the Station .

Choose "Vertical Collection Method" from the drop-down list box in the Combined Code Table named **Vertical Collection Method**.

Code range: 01-09, plus 99 = "Unknown"

Examples: 01 = Bathymetric Sounding
09 = Map Derived

Format: 2 numeric characters

**Vertical Datum**
A code describing the reference datum for the elevation of the Station .

This field identifies whether the NAVD88 or the NGVD29 is the reference for the vertical coordinate.

Choose "Vertical Datum" from the drop-down list box in the Combined Code Table named **Vertical Datum**.

Code range: 01 - 03, with no code 99

Examples: 01 North American Vertical Datum of 1988 (NAVD88)

02 North American Geodetic Vertical Datum of 1929 (NGVD29)

Format: 2 numeric characters

**Vertical Reference**
Describes the vertical reference point from which the Elevation of the Station was taken. Reference point of the elevational position on the surface of the earth.

Choose " Vertical Reference" from the drop-down list box in the Combined Code Table named **Vertical Reference**.

Code range: 01 - 06, plus 99 = "Unknown"

Examples: 01 = Elevation from mean sea level
06 = Local tide datum

Format: 2 numeric characters

**Waterbody**
Water that is sitting or flowing on the surface.

**Well**
A shaft or pit dug into the earth for the extraction of water.

*See also*
Well Station

**Well Identification Number**
The unique number assigned to each well in the State of Washington. It is also known as the Well Tag ID. The number is assigned by the Department of Ecology. It is stamped on an aluminum identification tag that is to be affixed to the well by the homeowner or licensed driller.

Use the Well Identification Number as the Station Identification Code when a Station is a Well Station.

Example: AAB100

Format 3 alpha (upper case) and 3 numeric characters

**Well Interval**
A vertically defined (upper and lower depth) section of interest within a well or borehole. The seven Well Interval Types are:

Borehole
Casing
Fill

Opening
Hydrogeologic Unit – an Underground Unit
Geologic Unit – an Underground Unit
Lithologic Unit – an Underground Unit

**Well Interval Depth to Bottom (Lower Interval)**
Required Field

The distance from the Well Interval Measuring Point to the bottom of the Well Interval being described, OR, the depth to the bottom of the hole segment from the Well Interval Measuring Point.

Units are expressed using Well Interval Depth Unit Code.

NOTE: To INSERT or UPDATE a Well Interval, the value entered for the Lower Level must be greater than the value entered for the Upper Level.

Example: 105.75

Format: 5 numeric characters and 3 decimal places

**Well Interval Depth to Top (Upper Measure)**
Required Field

The distance from the Well Interval Measuring Point to the top of the Well Interval being described, OR, the depth to the point where this section of the begins from the Well Interval Measuring Point.

**Well Interval Depth to Top (Upper Measure) -- continued**
Units are expressed using Well Interval Depth Unit Code.

NOTE: To INSERT or UPDATE a Well Interval, the value entered for the Lower Level must be greater than the value entered for the Upper Level.

Example: 4.894

Format: 5 numeric characters and 3 decimal places

**Well Interval Depth Unit Code**
Required Field

Units in which the Well Interval Depth to Top (Upper Interval) and the Well Interval Depth to Bottom (Lower Interval) are expressed.

Values: FT = Feet
M = Meters

Format: 2 alpha/numeric characters

**Well Interval Measuring Point**
The point from which the Well Interval is measured.

**Well Interval Measuring Point Description**
Required Field

Describes the primary measuring point (Well Interval Measuring Point ) for measuring Well Intervals at the well.

Example: Station elevation

Format: 40 alpha/numeric characters

**Well Interval Measuring Point Height**
Required Field

The measure indicating the height of the Well Interval Measuring Point above (+) or below (-) ground surface.

Units are expressed using the Well Interval Measuring Point Height Unit Code.

Example: 6.667

Format: 5 numeric characters and 3 decimal places

**Well Interval Measuring Point Height Unit Code**
Required Field

Units in which the Well Interval Measuring Point Height is expressed.

Values: FT = Feet
M = Meters

Format: 2 alpha/numeric characters

**Well Interval Type Code**
Required Field

The official USGS NWIS-II code that describes the type of Well Interval.

Select from list of permitted values.

Examples: Hydrogeologic Unit
Casing
Fill

Format: 18 alpha/numeric characters

**Well Log**
A record of the layers of earth penetrated during construction of the borehole. After construction, additional Well Logs may be conducted to identify other stratigraphic features or the well.

**Well Log Conducted Date**
The date on which the Well Log was developed.

Example: 06-24-1991

Format: MM-DD-YYYY

NOTES:

1. You *must* enter the hyphens; otherwise an error message will appear.
2. If the month and year are known but not the date within the month, enter the last day of the known month (e.g. 04-30-1998) If the year is known, but not the month, enter the last day of the known year (e.g. 12-31-1998)

**Well Log Location Description**
Describes the location of the Well Log.

Format: 120 alpha/numeric characters

**Well Log Report Format Code**
Required Field

Identifies the format of the stored Well Log.

Select from list of permitted values.

Examples: Rock Chip Chemistry
Files [Raw Data]

Machine Readable
Other

Format: 10 alpha/numeric characters

**Well Log Type Code**
Required Field

The code that represents the method used to record the Well Log.

Select from list of permitted values.

Examples: Acoustic Velocity
Drilling Time
Induction
Fluid Velocity
Video Tape Record

Format: 27 alpha/numeric characters

**Well Pump**
A mechanical device or lift installed in a well used to move liquids against a gradient (e.g. gravity, pressure).

**Well Pump Depth**
The depth from the Well Pump Location Reference Point to the top of the Well Pump.

Units are expressed using the Well Pump Depth Unit Code.

Example: 50.750

Format: 5 numeric characters and 3 decimal places

**Well Pump Depth Unit Code**
Units in which the Well Pump Depth is expressed.

Values: FT = Feet
M = Meters

Format: 2 alpha/numeric characters

**Well Pump Efficiency**
The efficiency of the pumping system in using the power supplied to it. Well Pump Efficiency is calculated by the following equation:

PUMP EFFICIENCY, in percent, = (Discharge, in gal/min * total head, in feet)/3960 *input horsepower)

Example: 10

Format: 10 numeric characters

**Well Pump Installation Date**
The date the Well Pump was installed.

Example: 12-12-1979

Format: MM-DD-YYYY

NOTES:

1. You *must* enter the hyphens; otherwise an error message will appear.
2. If the month and year are known but not the date within the month, enter the last day of the known month (e.g. 04-30-1998) If the year is known, but not the month, enter the last day of the known year (e.g. 12-31-1998)

**Well Pump Intake Depth**
The depth to the bottom of the pump bowls or intake below land surface. That value desired for this entry is the maximum distance the water level can be drawn down before the pump breaks suction.

Units are expressed using the Well Pump Intake Depth Unit Code .

Example: 2.25

Format: 5 numeric characters and 3 decimal places

**Well Pump Intake Depth Unit Code**
Units in which the Well Pump Intake Depth is expressed.

Values: FT = Feet
M = Meters

Format: 2 alpha/numeric characters

**Well Pump Location Reference Point**
Describes the point on the well or well structure from which each Well Pump measure is made.

Example: Depth from top of casing

Format: 60 alpha/numeric characters

**Well Pump Model Name**
The manufacturer's model name/number for a Well Pump.

Example: QPUMP 2000

Format: 20 alpha/numeric characters

**Well Pump Manufacturer Name**
The name of the Well Pump manufacturer.

Example: HydroPump, Inc.

Format: 20 alpha/numeric characters

**Well Pump Power Source**
Required Field

Indicates the type of power used to power the Well Pump.

Select from list of permitted values.

Examples: Diesel Engine
Windmill

Format: 15 alpha/numeric characters

**Well Pump Rated Capacity**
The manufacturer's pump capacity rating.

Units are expressed using the Well Pump Rated Capacity Unit Code.

Example: 70

Format: 4 numeric characters and 2 decimal places

**Well Pump Rated Capacity Unit Code**
Units in which the Well Pump Rated Capacity is expressed.

Values: Gallons per Minute
Cubic Feet per Second

Format: 3 alpha/numeric characters

NOTE: System converts each permitted value to a three-character code (e.g. Gallons per Minute = GPM; Cubic Feet per Second = CFS)

**Well Pump Rated Power**
The horsepower/watts rating of the primary power source. measure that indicates the power output of the Well Pump at the manufacturer's designed revolutions per minute (RPM).

Units are expressed using the Well Pump Rated Power Unit Code.

Examples: 40.00
.5

Format: 2 numeric characters and 2 decimal places

**Well Pump Rated Power Unit Code**
Units in which the Well Pump Rated Power is expressed.

Values: Horsepower
Watts

Format: 1 alpha/numeric character

NOTE: System converts each permitted value to a one-character code (e.g. Horsepower = H; Watts = W)

**Well Pump Rated RPM**
The measure that indicates the designed operating speed of the Well Pump in revolutions per minute (RPMs) as stated by the manufacturer.

Example: 375

Format: 4 numeric characters

**Well Pump Removal Date**
The date the Well Pump was removed.

Example: 11-30-1985

Format: MM-DD-YYYY

NOTES:

1. You *must* enter the hyphens; otherwise an error message will appear.
2. If the month and year are known but not the date within the month, enter the last day of the known month (e.g. 04-30-1998) If the year is known, but not the month, enter the last day of the known year (e.g. 12-31-1998)

**Well Pump Serial Number**
The serial number of the Well Pump.

Example: e23463458

Format: 20 alpha/numeric characters

**Well Pump Total Head**
Consists of the pumping (production) water level, the additional head above land surface, and friction loss. Total Head is what the pump works against.

Units are expressed using the Well Pump Total Head Unit Code.

Example: 50

Format: 8 numeric characters

**Well Pump Total Head Unit Code**
Units in which the Well Pump Total Head is expressed.

Values: FT = Feet
M = Meters

Format: 2 alpha/numeric characters

**Well Pump Type Code**
Required Field

Identifies the type of Well Pump installed in the well.

Select from the list of permitted values.

Examples: Submersible
Bucket
Air Lift

Format: 16 alpha/numeric characters

**Well Station**
A well that may contain several predefined sampling points which are distinguished by depth. It may be comprised of several wells as in a well field.

NOTE: Some organizations consider the different depths as separate Sampling Stations.

**Well Station Aquifer Test Indicator Flag**
Indicates whether aquifer testing has been performed.

Values: Y = Yes
N = No
Unknown

Format: 1 alpha/numeric character

**Well Station Comment**
Brief comments or other information about the construction of the well .

Format: 254 alpha/numeric characters

**Well Station Completed Depth**
The depth of the finished well below land-surface datum. The depth of the well is the greatest depth to which the well can be sounded.

If measurement is not practical, enter the reported depth at which the well was finished. This field should be completed for wells whenever possible.

Units are expressed using the Well Station Completed Depth Unit Code.

Example: 48.84

Format: 5 numeric characters and 3 decimal places

**Well Station Completed Depth Unit Code**
The units in which the Well Station Completed Depth is expressed.

Values: FT = Feet
M = Meters

Format: 2 alpha/numeric characters

**Well Station Completion Type Code**
Indicates the method of completion or the nature of the openings that allow water to enter the well.

Select from list of permitted values.

Examples: Gravl Pack Perf
Open Hole
Other
Screen

Format: 15 alpha/numeric characters

**Well Station Construction End Date**
The date that construction was completed on the well or borehole.

Example: 04-23-1995

Format: MM-DD-YYYY

NOTES:
1. You *must* enter the hyphens; otherwise an error message will appear.
2. If the month and year are known but not the date within the month, enter the last day of the known month (e.g. 04-30-1998) If the year is known, but not the month, enter the last day of the known year (e.g. 12-31-1998)

**Well Station Construction Method Code**
Identifies the method used to create the borehole.

Select from list of permitted values.

Examples: Air Rotary
Bored or Augered
Hydraulic Rotary
Driven
<Blank>

Format: 2 alpha/numeric characters

NOTE: System converts each item from list of permitted values to a two-character code (e.g. Air Rotary = AR)

**Well Station Construction Start Date**
The date the borehole excavation began.

Example: 04-23-1995

Format: MM-DD-YYYY

NOTES:

1. You *must* enter the hyphens; otherwise an error message will appear.
2. If the month and year are known but not the date within the month, enter the last day of the known month (e.g. 04-30-1998) If the year is known, but not the month, enter the last day of the known year (e.g. 12-31-1998).

**Well Station Development Method Code**
Identifies the method by which the efficiency of the well was improved after it was constructed.

Values: Air Lift
Surge Block
Jet
Chemical Treatment
Bail

Format: 2 alpha/numeric characters

NOTE: System converts each item from list of permitted values to a two-character code (e.g. Air Lift = AL)

**Well Station Disinfected Indicator**
Indicates whether the well was disinfected at the time of completion.

Values: Y = Yes
N = No
Unknown

Format: 1 alpha/numeric character

**Well Station Flow Indicator**
Indicates whether a flow measuring device is in place.

Values: Y = Yes
N = No
Unknown

Format: 1 alpha/numeric character

**Well Station Gradient Type Code**
Describes the relation of the water table elevation in the well with the water table elevation at the point of interest, such as a source of contamination. It is applied to wells monitoring a known source of potential ground water contamination such as landfills and RCRA sites. For example, RCRA regulations require that wells be placed upgradient and downgradient from known contamination sources.

Values: Upgradient
Downgradient
Crossgradient
Unknown
<Blank>

Format: 1 alpha/numeric character

NOTE: System converts each item from list of permitted values to a single-character code (e.g. Upgradient = U; Unknown = N)

**Well Station Hole Depth**
The depth below land surface to the bottom of the hole on completion of drilling.

Units are expressed using the Well Station Hole Depth Unit Code.

Example: 22.500

Format: 5 numeric characters and 3 decimal places

**Well Station Hole Depth Unit Code**
The units in which the Well Station Hole Depth is expressed.

Values: FT = Feet
M = Meters

Format: 2 alpha/numeric characters

**Well Station Identification Number**
Required Field if Well Station has multiple wells

The user-assigned number that uniquely identifies each Well that is associated with a Well Station..

NOTE: This is NOT the same as the Well Identification Number.

Examples: 113
684

Format: 3 numeric characters

**Well Station Indicator Flag**
A flag (i.e. a check mark [ ]) that indicates the Station is also a Well Station . Additional data must be entered for a Well Station.

Click on the text box to place a in the box or to remove an existing .

Format: in box = "Y" (= YES, is a well station); lack of a = "N" (=NO, not a well station).

**Well Station Measuring Point**
The point at which the height of a Well Station is measured.

A Well Station may have multiple measuring points.

Each Well Station Measuring Point has the following attributes:

Well Station Measuring Point Name
Well Station Measuring Point Height
Well Station Measuring Point Height Unit Code
Well Station Measuring Point Height Effective Date
Well Station Measuring Point Height End Date
Well Station Measuring Point Height Description

**Well Station Measuring Point Description**
Required Field for each Well Station Measuring Point

Describes the point at which the water level was measured (Well Station Measuring Point Height), or a sample was taken (i.e. the Well Station Measuring Point).

Example: Top of casing at file notch on the north side.

Format: 40 alpha/numeric characters

**Well Station Measuring Point Height**
Required Field for each Well Station Measuring Point

The height above or below the Station elevation of one or more permanent marks on the casing (Well Station Measuring Point). A measuring point below the station ground surface elevation is preceded by a minus (-) sign.

Units are expressed using Well Station Measuring Point Height Unit Code.

Example: 5.5
-2.25

Format: 5 numeric characters (including a minus sign if appropriate) and 3 decimal places

**Well Station Measuring Point Height Effective Date**
The date on which use began for the Well Station Measuring Point specified in the Well Station Measuring Point Description.

An Effective Date may be entered for each Well Station Measuring Point.

Example: 04-23-1995

Format: MM-DD-YYYY

NOTES:
1. You *must* enter the hyphens; otherwise an error message will appear.
2. If the month and year are known but not the date within the month, enter the last day of the known month (e.g. 04-30-1998) If the year is known, but not the month, enter the last day of the known year (e.g. 12-31-1998)

**Well Station Measuring Point Height End Date**
The date on which use ended for the Well Station Measuring Point specified in the Well Station Measuring Point Description.

An End Date may be entered for each Well Station Measuring Point.

Example: 02-15-1997

Format: MM-DD-YYYY

NOTES:
1. You *must* enter the hyphens; otherwise an error message will appear.

2. If the month and year are known but not the date within the month, enter the last day of the known month (e.g. 04-30-1998) If the year is known, but not the month, enter the last day of the known year (e.g. 12-31-1998)

**Well Station Measuring Point Height Unit Code**

Required Field for each Well Station Measuring Point

The units in which the Well Station Measuring Point Height is expressed.

Values: FT = Feet
M = Meters

Format: 2 alpha/numeric characters

**Well Station Measuring Point Name**

The name of the Well Station Measuring Point associated with the Well Station Measuring Point Description.

A Name may be entered for each Well Station Measuring Point.

Example: Casing Top North Notch

Format: 8 alpha/numeric characters

**Well Station Status Code**

Required Field

Describes the current condition of the well.

Values: Active (default value)
Abandoned

Format: 9 alpha/numeric characters

**Well Station Use Code**
Required Field

Identifies the primary use of the well.

Select from list of permitted values.

Examples: Drainage
Heat Reservoir
Withdrawal of Water

Format: 30 alpha/numeric characters

**Well Station Water Primary Use Code**
Identifies the main use of water from a well..
Select from list of permitted values.

Examples: Air Conditioning
Bottling
Unused
Other

Format: 19 alpha/numeric characters

**Wellhead Protection Area Name**
The name of the wellhead protection area in which the well is located. (Check with the Department of Health, Drinking Water Division.)

Example: McCallister Springs Wellhead Protection Area

Format: 40 alpha/numeric characters

**WRIA**
The acronym "WRIA" stands for Water Resource Inventory Area. The WRIA is a water basin numbering system that the State of Washington uses.

*See also:*
WRIA Identification Number

**WRIA Identification Number**
No entry needed. The program "Skipper " will populate this field.

The identification number of the Water Resource Inventory Area (WRIA) in which the Station is located.

If you wish to enter a WRIA Identification Number for a Station, click on the prompt and choose the appropriate one from the drop-down list box of the Combined Code Table named **WRIA Identifier**.

NOTE: If you wish to use a "WRIA Identification Number" for Report Selection purposes, click on the down arrow next to the text box; then, click on the appropriate WRIA Identification Number from the drop-down list box.

Code range: 01-62, with no code 99 for "Unknown"

Examples: 01 = Nooksack
18 = Elwha – Dungeness
60 = Kettle

Format: 2 numeric character